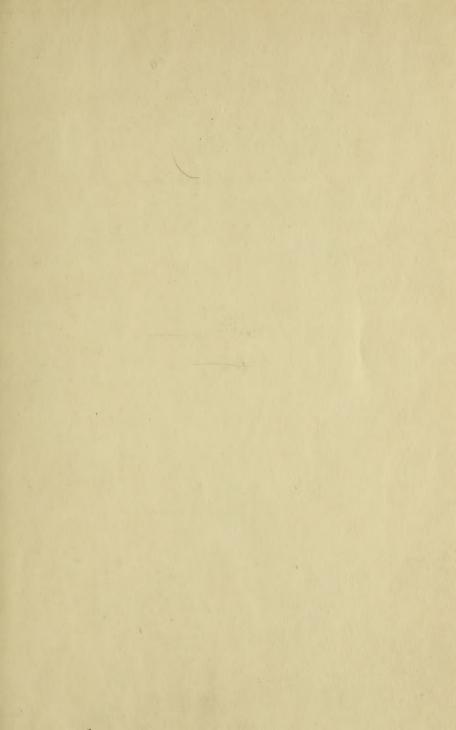
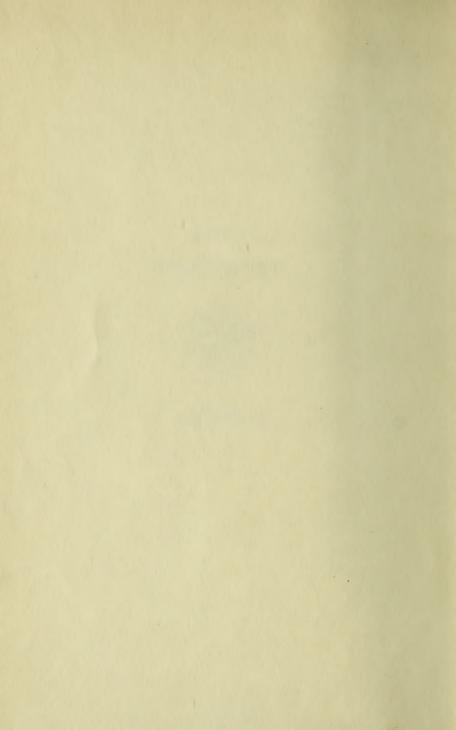
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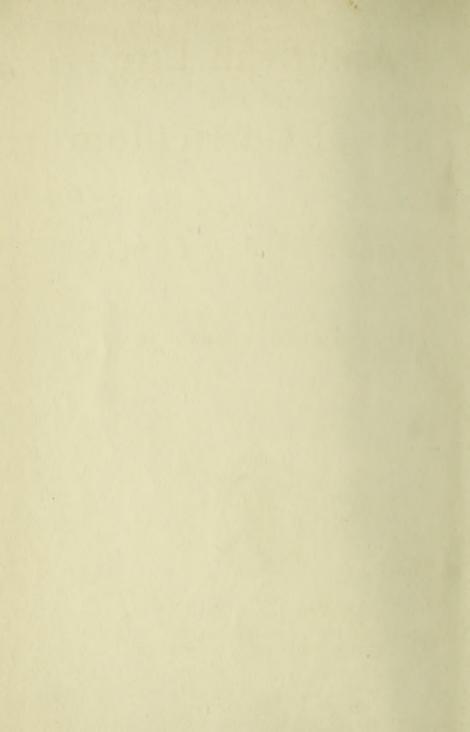


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American Life and the School Curriculum

Next Steps
toward Schools of Living

By HAROLD RUGG
TEACHERS COLLEGE, COLUMBIA UNIVERSITY



GINN AND COMPANY

BOSTON • NEW YORK • CHICAGO • LONDON • ATLANTA
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Three Curves of Social Trend

Out of the Dawn of the New Industrial Culture
Three Curves of Interdependent Social Trends
Traced Themselves on the Moving Record of History:
Economic Productivity... Social Invention... Popular Consent.

Throughout the First Day of Industrialism

It Was Taken for Granted that All Three Would Rise
Sufficiently Synchronized to Preserve Social Stability.

But under the Momentum of Expansion
Economic Productivity Was Sharply Accelerated,
while Social Invention and Popular Consent
Lagged Cumulatively Behind.

Meanwhile

Other Constituent Trends, Such as the Growth of Population, Which Had Given Life to the Advance of Man's Productivity, Passed Points of Inflection and Gave Fair Warning of Impending Social Change.

To the People Generally These Changes from Positive to Negative Acceleration Meant Nothing.

But to the Men of Creative Design —

The Engineer, the Statesman, the Educator —

They Were Signposts of a Great Transition.

Hypothesis

When, Therefore, in the Calculus of Human Events
the Curves of Interdependent Social Trends
either Pass Points of Inflection
or Produce Equations of Different Orders,
Men of Intelligence Revise Their Systems of Thought
and Design New Courses of Democratic Action.

Foreword

A BIT of personal history as this book goes to press.

For about sixteen years I have worked with little interruption at two major tasks: first, the painting of a portrait of industrial-democratic culture for our young people; second, the interpretation of its use by educational workers. The former endeavor has now made available Man and His Changing Society¹; the latter has resulted in *The Child-Centered School* (1928), Culture and Education in America (1931), The Great Technology: Social Chaos and the Public Mind (1933), and finally this present American Life and the School Curriculum.

Although I regard this latest book as little more than a body of hypotheses to be more completely documented in the years to come, it is my first full-length treatment of the problems of American culture and education. Each of the other books treated special phases of our scene. The first was an appraisal of the progressive schools. The second was essentially a study of our current pragmatic philosophy, of the role of the artist in American life, and of the contribution of each to education. The third book, written in the very trough of our so-called depression, was a brief documentation of the transitional nature of our times and a plan for a swift, nationwide program of adult education. But no one of these earlier books attempted to deal with the total problem.

¹ A fourteen-volume series which presents an integration of the chief trends of culture, the factors that produced them, and the current problems that have emerged (Ginn and Company, Boston, 1929). These were based upon the three experimental editions known as *The Social Science Pamphlets* (1922–1929).

In American Life and the School Curriculum I have attempted the somewhat more ambitious task of making a synthesis of the principal strands of American culture. I am convinced that while the great research tasks of the nineteenth century were chiefly explorations in analysis, those of our twentieth century will be enterprises in the building of new syntheses of knowledge. A pertinent example is found in the current need of educational workers for an integration of the factors that brought about our industrial-democratic culture. Only by grasping clearly the facts of and the reasons for our fathers' spectacular success in building a magnificent production system and their corresponding failure to set up a humane and efficient method of distribution can educators possibly develop a generation of Americans that will pull our democratic culture through the social crisis of the Great Transition.

Most of our people deeply want to do just that. Their tradition favors the method of democracy; their dream of collective life has sprung from it. But can the present high-powered and interdependent system of industry, agriculture, business, and government continue to be operated by the democratic method? Yes, I think so - IF our people now wholeheartedly accept the concept that government in a democracy is education! If they swiftly build a nationwide program of honest, intelligent, and intelligible education for adults as well as for our youth and our children. Certainly the most important political fact about our grown-up people is that they do not understand the deeper significance of what has happened on the North American continent in the past three generations! Hence, if we are to succeed in carrying through social reconstruction by means of democratic rather than tyrannical methods, a prime necessity is the building of intelligent understanding of trends and factors and alternative courses of action in the minds of a vast minority of our people. And to do that teachers must have at hand clear integrations of the factors that produced the society and its program of education.

One student's version of the needed synthesis of knowledge is given in this book. Even though it has run nearly to five hundred pages, I know only too well that it is but a synopsis. To expand that into the epic description that is needed would require a dozen large volumes; but even if these were written, they very likely would never reach the educational public that needs them most. Hence I submit the present sketchlike volume as a tentative introduction to the larger library. It is primarily for teachers that I have written the book—for teachers and for those lay members of the community who are now willing to accept vigorously their citizenship obligations to participate in the swift reconstruction of education and, through it, of the social order itself.

The emphasis here on the social scene should not mislead the reader concerning the central problem of this work. This is primarily a volume on the school curriculum — but on the curriculum seen in the framework of our changing society. It is divided into two books. Book I shows how the mass-school arose in the hectic times of the clearance and settlement of the continent during the Machine Age; how far education was separated from, how far it lagged behind, the community and national life which built it as a guaranty for the success of political democracy. Book II analyzes the problem of educational reconstruction in our times. In doing so it presents the psychological and educational concepts that have emerged from the past fifty years of research and practical experience. Finally Book II offers a program of next steps in curriculum-reconstruction.

I have given the book a secondary title—"Next Steps Toward Schools of Living"—to orient the reader to my theory, program, and educational strategy. This is made necessary by the nature of our times and the temper of the American mind. If we could build now, with dispatch, the Great Society of abundance, tolerance, and beauty which is potentially on the horizon, there would need to be no temporizing "next steps." In such a society—sufficiently socialized, sufficiently individualized—education would be part and parcel of every phase of the culture—of its economic system, its government, its art, its social living. The community would be "school-centered" in

the fullest sense of the word, and the "curriculum" would be synonymous with the complete personal and social living of the individual.

But it is clear that we do not now live in such a social order. On the contrary, we live in the competitive, exploitive society which I have described in Book I. And we also live in the psychological world of aggressive egocentric individuals, which is portrayed in Book II. Hence my conclusion: that educators, acquiescing momentarily in the present social system, but energized and guided by their ideal social order, must build their best makeshift program of educational and social reconstruction. This will be a dynamic program, a program which fuses education and democratic political action and which embraces current conditions, moving trends, and ultimate goals.

I see our social-educational problem as that of (1) creating intelligent understanding in a large minority of the people, (2) practicing them continually in making group decisions concerning their local and national issues, and (3) having them constantly exert pressure upon legislators and executives in government to carry out their decisions.

This program fuses education, political decisions, and political action into one process. It brings adults and young people into the same community enterprise. It integrates information-getting, decision-making, and community action.

This is the democratic method in action.

New York City, July 16, 1936

HAROLD RUGG

Acknowledgments

IN APPROPRIATE places I have acknowledged the courtesies of authors and publishers to whom I am indebted for quoted material. But I wish particularly to convey to the Board of Directors of the National Society for the Study of Education my appreciation for their support of the work of the Committee on Curriculum, of which I was chairman, and which in 1926 prepared the Society's two-volume twenty-sixth yearbook. The Directors have now graciously permitted me to quote and modify some of the historical materials which I wrote as the first five chapters of Part I of that yearbook.

My indebtedness to pioneer students on the frontiers of American thought and feeling will be evident to many readers of this book. For help in the technical task of preparing it I am indebted to my assistants—Pauline Thompson, Marvin Krueger, Ruth Muriel Aspray, and Ruth LaVoy.



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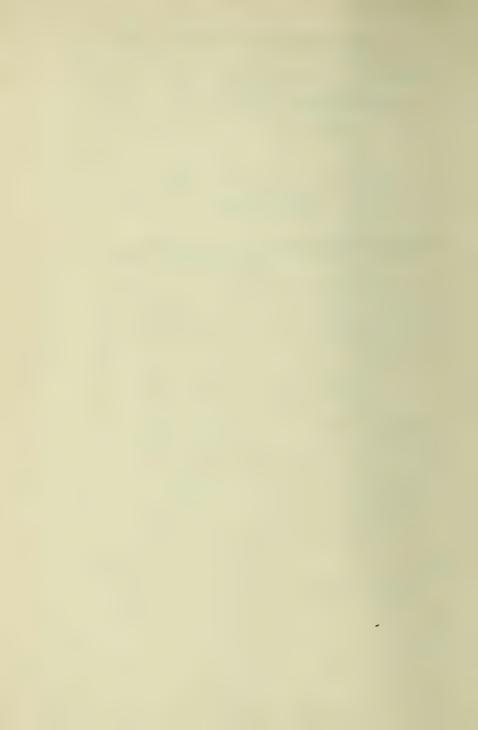
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AMERICAN LIFE AND THE SCHOOL CURRICULUM

Book One

Education in the First Industrial Society



Part I

SCHOOL AND SOCIETY



CHAPTER I · EDUCATION AND THE DRAMA OF AMERICAN LIFE

Prologue

SINCE WE must open the curtain on the vast drama of American life somewhere, let us look first at a characteristic educational scene. Let me take you into a school. Not an unusual school, not an "experimental," "progressive," or "child-centered" school; just one of the thousands of garden-variety graded schools which dot the landscape of all modern countries today. We begin, then, with what we know — and we all know the graded school.

But as we pass a few moments in it, let us not forget its relation to the civilization which produced it. Let us remember that it is the only organized agency by which a generation of informed, thinking people can now be intelligently introduced to their culture. Let us not forget that this is the education by which our people propose to carry on the new industrial civilization. This is our basic means for guaranteeing the success of democratic government.

THE EDUCATION OF ALL THE CHILDREN OF ALL THE PEOPLE

Come, then, into one of our modern graded schools. Not in Massachusetts or Illinois, Texas, Oregon, or Minnesota, but ten thousand miles away from them in an interior tropical village of Jolo, one of the southern islands of the Philippines. We climb the bamboo steps, walk along the unsteady bamboo corridor, and enter a room labeled "Grade V." We squeeze our

selves into one of the double bamboo seats beside one of the forty little dark-skinned children, and listen to the recitation. The time schedule on the wall, which divides the day into a score of fifteen-minute or twenty-minute periods and education into academic subjects, now calls for "Geography." An assignment has been made — two pages of facts about the island of Luzon.

The teacher, a seventeen-year-old Malay girl, with the geography text and the Official Course of Study open before her, calls the questions and checks up the answers, which comprise both the recitation and the bulk of all "education."

"Juan, stant oop!" she says in the standard "bamboo" English which the American government imposed on the Filipinos thirty-odd years ago. It is the only language allowed inside schoolhouses from the very first day of school. Juan springs to his bare feet and, stiffly erect, waits for the dreaded question.

"Juan, vaht iss dee preencipahl produc' off Luzon?"

With a bright smile of relief, because he remembers the answer from the textbook, Juan answers in equally good bamboo English, "Dee preencipahl produc' off Luzon ees abaca." "Correck," says the teacher, and Juan sits down.

"Marianne," turning to a little girl on the other side of the room, who duplicates Juan's military response. "Vaht iss dee capeetahl ceety off Luzon?"

The child, also relieved at getting a question the answer to which she knows, recites glibly, "Dee capeetahl ceety off Luzon ees Maneela." "Correck," comes the robot-like taskmaster's evaluation, and Marianne sits down.

Up and down the flimsy building we go, stopping for a moment at the doorways of various grade rooms. We find them all alike: the screwed-down furniture, the fidgety sitting still of the children, the textbook assignments, the question-and-answer recitations, the order and tense quiet. Every day in every grade there is a succession of identical class periods: reading, writing, arithmetic, gymnastics, sight-singing, drawing, the forty-seven irregular verbs, geometrical demonstration, the parsing of this, and the declension of that.

So we could go up and down the whole length of these Malay islands, looking into more bamboo schools, hearing more black-eyed, dark-skinned teachers command and exhort, mark and promote more Juans and Mariannes from the kindergarten to college. For this "modern" school system, like the modern large-scale factory, is everywhere an aggregation of standardized units. Everywhere in the Philippines school administrators can paraphrase with pride the boast of a historic state commissioner of education, "I know at this minute precisely what the children are doing in Manila, in Cebu, in Iloilo, or in Zamboanga." Everywhere part-way literates are being turned out. A familiar uniform, mechanized process marks the order of every day.

But not only in the Philippines! The invitation "Come with me into an American school" could be given and accepted throughout the reaches of our empire, and the same standardized school could be found. The school of your childhood, whether you grew up in New England or in the South, in the Middle West or on the Pacific coast, has its replicas throughout our continent and on our scattered islands — in Alaska and the Canal Zone, in Puerto Rico and the Virgin Islands, in Hawaii and Guam. In each of these we have made education synonymous with the formal graded school.

BUT THIS GRADED SCHOOL IS COMMON TO ALL THE INDUSTRIAL WORLD

This mass-model school exists within the boundaries of other empires as well as within those of the United States. Every industrializing country of the earth has set up the same general type of education. Consider an illustration given by a recently returned observer of Italian schools:

As we approached the room we could see the children through the glass door, heads bent over slates, busily engaged in writing something. The room was equipped with screwed-down, double desks of uniform size. Each one was occupied by two children....

¹ Nila Banton Smith, "Glimpses into Foreign Classrooms," Childhood Education, February, 1933.

Reading lesson ... [the teacher] opened the lesson by telling each child to sit up straight and place her hands behind her. A few minutes were spent in reviewing sounds of letters previously taught. A new sound was then presented and pronounced by the children.... After this the children were directed to turn to a designated page in their reader and read several words in which the new sound was applied. The teacher closed the lesson by dictating and writing on the board a little story which made much use of the new sounds taught. ...

At recess the children filed out of the room two by two, feet in perfect time, in a long straight line down the hall and out to the

playground.

I found the playground to be occupied by several groups of children each doing formal calisthenics under a teacher's direction. One group was receiving instruction in the art of giving the Roman Salute. The first grade whom I had been observing were put through a series of rigorous gymnastics by the teacher.

Even ancient China has succumbed to the pressure for literacy, and today the education of young Chinese is a replica of the European-American system. I could take you into schoolhouses and classrooms built on this mechanized plan in every eastcoast city of China, from Tientsin in the north to Canton in the south. Eight million docile young Chinese are learning to read from Westernized primers and readers; learning to write by the "push and pull" arm-movement system; learning to add, subtract, multiply, divide, and solve equations; learning to parse and decline and translate from textbooks which were devised for another people and another soil; learning categories of species as given in American school textbooks in zoology and botany all this because Chinese leaders, enjoying the comforts of our steam-heated, motor-driven, luxurious civilization, and aspiring to a parallel standard of living, have introduced into their own country not only our machines and systems of trade but the structure of our modern graded school as well. They, like our own educational leaders, consider such a graded school the proper instrument for a complete education.

Space is lacking in which to multiply examples. They could be duplicated easily, however, in the seventy-five countries of the world. England has built the same kind of educational system in the British Isles and has introduced it into India, Australia, Canada, South Africa, and her crown colonies and mandated territories. In every unit of the French empire — from la belle France herself to her African and Asian possessions — "schools" and "education" are essentially the same thing. And even as I write the Russians are engaged in swiftly setting up the graded school throughout the vast Eurasian territory of the Union of Soviet Socialist Republics.

Thus, wherever the Machine Age has herded people into manufacturing towns, wherever the printing press has whetted appetites for the printed page, schools of literacy have flourished. So today within each national scene regiments of children, classified into school grades, are "taking notes" from the precise lectures and outlines of teachers, pronouncing and reckoning, singing in unison, memorizing Europe's ancient political and dynastic history, analyzing the form and structure of the literary classics and the morphology of plants and animals, reproducing with pen or brush the copybook's standards of "art," saluting flags, and reciting national oaths of allegiance. Thus, although the languages of the peoples of the earth, their physical characteristics, dress, architecture, and traditions are peculiar to the separate fatherlands, the fundamental character of their education is the same.

This, then, is the typical "modern" school — the school of industrial countries. But it also constitutes the "education" of the people of these countries; for in them all, "education" and the formal "school" are regarded as identical. One thing, at least, the so-called modern school has done. It has taught 90-odd per cent of the people of these countries to read and write and reckon, which is no mean achievement. It has produced literacy around the world. But has it done more than that? Has it really educated the people?

Has it made the 600,000,000 inhabitants aware of the crucial issues and problems which now confront more than threescore nations of the earth? Has it given them understanding of the scientific method of thinking? of the manner in which the devel-

opment and application of this scientific method in the past millennium have produced modern industrial-democratic cultures? Has it made them sensitive to beauty and to the method of its personal expression?

Our Times: a Difficult Period of Transition

I will strive throughout this book to answer these questions, for they are crucial to the very continuance of our society. Today, more than ever before, we are confronted by the need to produce an education which will equip our people to meet novel and difficult problems. We are living in a period of frightening transition, when every phase of our social scene is changing swiftly. On all sides we witness the signs of a widespread impasse; the stalling of our economic system and the mental and moral disintegration of millions of people present commanding examples.

As for the ineffectiveness of the economic system, note a few conspicuous symptoms:

After seven years of depression, there are not less than 12,000,000 people out of work, excluding the part-time workers and several million youth who have left our schools in recent years and have never had a job.

The physical wealth of the country is controlled, and much of it withheld from use, by a small fragment of the population.

The national government resorts to temporizing measures of relief, such as that of pouring credit money into "made work" and restricting instead of expanding the production of things.

Technological improvement in the machine production of things, even in a great depression, continues to accelerate, ousting more and more industrial workers from their jobs.

The signs of mental and moral disintegration are even more disturbing; note the following:

The widespread mental strain among millions of people fatigued by the constant struggle to exist. The dissatisfactions and resentments among a growing number of people because of the disparity between our potential plenty and our actual poverty.

The decline of the American family as a true social and educational

center and as the crucial unit of national life.

The speculative mania among large numbers of the people to get something for nothing.

The decline in the traditional American attitude of responsibility for community co-operation, and its replacement by a ruthless kind

of competitive and rugged individualism.

The bewilderment of the man-on-the-street, who is losing his grip on the fine loyalties characteristic of the first American period and who now asks, "How can I live a life of integrity in the midst of such a chaotic period of economic change and social and moral uncertainty?"

I refer to these superficial signs of danger in contemporary America for two reasons. The first is to remind the educational worker that the true measure of the validity of the education that we have developed lies in the actual conditions of our people; a valid program of education must be constructed directly from the life of the people. That thesis I will document throughout this book.

But the second reason is our particular concern at this point. It is that our times constitute a crucial period of transition from the first stage of industrial development to the second. That period covers more than the few years of world-wide depression since 1929, which are tumbling the structure of modern civilization about our heads. Indeed, the contributory factors to this debacle have been building for many decades. Hence the inception of "our times" can be located on the time-line of modern industrial civilization at the very turn of the twentieth century. To document the chronology a bit:

Remember that it was in the 1890's that the first premonitory rumblings of the social changes which were to sweep upon us in our day were felt. Recall the difficulties that were added to the burdens of labor in America soon after that by the total disappearance of free land and the immigration (between 1899 and 1914) of 15,000,000 eastern and southern Europeans, most of whom settled in our industrial zone. Recall also that those years saw

The invention of the automobile and other automotive facilities.

The expansion of the central electric-power station, transmitting power over long distances.

The greatest advance in technological productivity in our entire history.

The invention of the wireless, the radio, and the motion-picture mechanism, and their impact on family and community life.

The use of these inventions, together with the press and other agencies of communication, in the formation and control of the public mind.

Bring to mind the astonishing drift from farm to town and from town to city, with consequent far-reaching changes in family and neighborhood life, increase in crime and in corruption in government, the speeding up of the tempo and restlessness of modern life, its mounting anonymity and impersonality, and the increase of apathy among the rank and file of the people concerning collective affairs.

These, then, were characteristic of the accelerating change that occurred at the turn of the twentieth century. But although the current became increasingly rapid, its pace seemed slow indeed when put against that of the 1920's. For the First World War (1914–1918) came in between the two periods and artificially expanded technological invention, the production of goods, world trade, and all our other economic activities. Moreover, it also expanded our expectations, puffed up our wants, and created the conviction that ours was indeed the best of all possible worlds and that nothing could ever break it down. That was in 1918.

Then, I need hardly remind my readers, in the winter months of 1929–1930 we were rudely awakened from our anesthesia to find that the bottom had dropped out of far more than the stock market. Our whole social world — economics, government, and psychology — seemed topsy-turvy, and our people, business and political leaders as well as the men-on-the-street, walked in an uncomprehending daze. On every hand people asked: "But America was really the rich country of the earth, wasn't it?

What has happened?" And the richest people of the world — a world whose inventive geniuses had created new producing mechanisms and clever corporate catchalls for wealth, whose business leaders had been educated in the formulas of the graded school and the college — were unable to answer the question, unable to offer solutions for any real reconstructive way out of the impasse. Psychological as well as economic deflation collapsed the whole civilization. In a year, while the paper value of our national enterprise shrank \$150,000,000,000 (although hardly a strut of the physical structure wore out!), the Western man's estimate of himself was deflated in even larger proportions.

This introductory chapter is not the place to attempt a history of these years since 1890; that can be adequately comprehended only in the light of the longer perspective which will be built up in this book. But the examples cited supply enough concrete material to make clear the special nature of our times; they are indeed a period of far-reaching transition between the first and second stages of the Industrial Revolution,

A New Critical Period: Testing the Democratic Principle

Once again America is in a "critical period" comparable to that of the 1780's, which followed the winning of independence. Our people are now testing whether the principles of democracy for which their fathers fought and died will work under the new and unknown conditions of modern industrial society. The new problem is set in novel economic and social conditions, chief among which are a huge and mixed population formed from divers racial and national stocks and cultural backgrounds, scattered in nearly twenty thousand communities over a vast continent, lacking sure knowledge of their collective affairs, and bewildered and uncertain as to which pathways to follow toward tomorrow. As a result, a crucial question confronts the American people. Under these conditions can they carry on a high-

powered and interdependent system of industry, agriculture, business, and government by the democratic method?

Most of them sincerely want to do so. Their entire tradition favors the method of democracy; their dream of collective life has sprung from it. For a century and a half they have fought to maintain the opportunity of the individual to rise to the highest life of which he is capable, and to carry on their collective affairs through the method of free discussion by free men.

Their leaders saw long ago that the success of democracy depended upon the establishment of a firm foundation in the concept of liberty. To them liberty meant especially two things. The first was the right of the people to civil liberty — freedom of speech, press, movement, assemblage, trial by jury, and the like. That right they have now definitely guaranteed in constitutional documents. The second was political liberty, the right to the suffrage — that is, to register their judgments at the polls by choosing representatives, judges, and executives to legislate, judge, and act for them. To establish these political liberties required thirteen decades (1790-1920) of constant group struggle even after the national government had been successfully founded. We see therefore that, in the century and a half since Yorktown and the Treaty of Paris, both the right to freedom of thought and expression and the machinery of discussion and of the suffrage were established.

But today, in spite of the vigorous struggle and the steady gains of the democratic idea, its feasibility is being challenged in a score of countries and its principles are being violated on every side, even in our America, which many regard as the chief cradle of liberty in the world. In Italy, Germany, Russia, the Balkans, Japan, and many other regions, dictators kill, exile, and imprison the devotees of democracy and openly deride that method as a way of government. Within our own borders Fascist forces have made less headway, but the danger of their increasing success hangs over the people constantly. Nothing short of eternal vigilance will guarantee the continuance of the democratic tradition in these critical days.

Government in a Democracy Is Education

The gains of Fascism abroad and the imminent danger to democracy at home reveal to us that real democratic government cannot be brought about merely by establishing constitutional guaranties of liberty and by providing the machinery of the suffrage. There still remains the more fundamental problem of educating the people to an understanding of and participation in their collective affairs. For, as John Locke put it, over two hundred years ago, government can be democratic and stable only when it is based on the consent of the people. And the consent of a people is truly given only when they understand their problems and approve intelligently the acts of their representatives in government. Note the desiderata: "understanding"..."intelligent approval."

But these are *educational* concepts. They imply not only capacity for comprehension but trained ability as well. Hence in a democratic society education is not only an essential element of sound government. One can go even farther and say that government *is* education, social life *is* education. Government is the co-operative carrying on of economic-social-political activities. It is group study, discussion, and decision concerning collective problems. It is the unifying of the group mind of the people in support of a line of action that has been jointly studied and determined upon.

But this total process is social education. It consists of young and old citizens studying, thinking, discussing, initiating legislation, scrutinizing and reviewing acts of representatives, recalling them from office, ousting ineffective governments and installing new ones. But if the democratic process is to be anything more than the will-o'-the-wisp-like political fluctuation of a blind and credulous people, the process must take on the very nature of education. I repeat, In a truly democratic society government is education, and education on the social side is the practice of government. The two form an indivisible unity.

The Problem before Us

This first chapter, then, is our prologue to the drama of American life and education. It has done no more than set the stage, name the characters, and outline the theme.

- American industrial society, increasingly an essentially urban, cosmopolitan population carrying on a powerful civilization of physical production.
- 2. Democratic government, young and immature, with its constitutional guaranties and suffrage machinery established, but lacking intelligent understanding by the people and the means of active participation by them.
- 3. A formal educational system, equipped to build literacy among the people, their mental horizons slowly opening to new concepts of culture and growth.

The remainder of Book I will present the movement of the drama itself. The central theme will unfold along three great strands of advancing culture: the building of the European-American economic civilization, the fashioning of experimental forms of democratic government, and the building of the physical structure of formal education. Thus Book I sketches the achievements and deficiencies of the First Industrial Revolution.

In Book II the theme will change to reconstruction. The possibilities of a new education will then unfold before us. It will be an education founded on the experiments of the Great Transition, an education which gives promise of building understanding among a large minority of the people, and hence offers hope that the assumption of democratic government by the consent of the governed can be justified. Finally it will be an education which provides for production through creative expression and appreciation by multitudes of persons. In short, we will seek to form the outlines of an education appropriate to the production of modern men to live in a modern world.

CHAPTER II · THE CURRICULUM AND THE CULTURE OF THE PEOPLE

The Factors of the Educative Process

THIRTY-ODD years ago Mr. John Dewey, a pioneer social philosopher, wrote two essays on the reform of education. One, written in 1899, was called *The School and Society*; the second, dated 1902, was called *The Child and the Curriculum*. In selecting these two titles Mr. Dewey put his finger exactly on the crucial factors of school education. Today, as thirty years ago, these factors are the same:

- r. The school, which means essentially the artist-teachers, the designers and guides of the educative process.
- The society, that is, the civilization and culture in which the child lives.
- 3. The child, the person being educated.
- 4. The *curriculum*, that is, activities and materials, the great intermediary between the child and society.

Or, to assemble these factors more succinctly, reducing them to two:

- 1. A person living in a society.
- 2. A teacher helping him by means of the curriculum to understand that society and to take his best possible part in it.

The last factor, the curriculum, is in a real sense the educative process; and its design, construction, and operation therefore constitute the crux of the teacher's work. Nothing the teacher does is more important than planning and carrying on the ac-

tivities in which his pupils engage, and carefully assembling the materials which they need for their greatest possible growth. The study of the curriculum and of curriculum-making, therefore, becomes the very central interest of all educational workers—be they teachers, parents, administrators, or specialists. All other jobs in education depend upon the curriculum. Buildings, for example, can be properly designed, constructed, and operated only in terms of it; budgets must be planned to fit it; home and school co-operation is built around it.

THE CURRICULUM ITS TWOFOLD NATURE

The "curriculum" — an ugly, awkward, academic word, but fastened upon us by technical custom — is really the entire program of the school's work. It is the essential means of education. It is everything that the students and their teachers do. Thus it is twofold in nature, being made up of activities, the things done, and of the materials with which they are done.

- 1. Activities. On the side of activities the curriculum is the very life of the school. It includes the activities of clubs and other organizations, the assemblies and other group meetings, the work of class committees and student councils, the carrying on of newspapers, magazines, and "annuals," the sports and plays. It encompasses, furthermore, the researches and excursions in both school and community, the reading and study, the discussions and dramatizations, the aesthetic appreciation and creative expression, as well as the practice of innumerable techniques. The curriculum is, in short, everything the young people and their teachers do.
- 2. Materials. But the curriculum is more than this; it is also the materials which are used in these activities books, the drama of both stage and screen, painting, sculpture, architecture, lectures, music, the physical equipment of laboratory and shop, of studio and lecture room. Thus the curriculum is not only everything that is done but also the vast range of materials employed in the doing.

THE CURRICULUM INTERMEDIARY BETWEEN SOCIETY AND CHILD

This twofold nature of the curriculum reveals it as the very heart of the school, the great intermediary between growing human beings and the culture in which they live. It cannot, therefore, be separated either from the children and youth or from the total society of which they are a part. Its content and organization spring, on the one hand, from the needs of learners for orientation and direction and, on the other hand, from the physical civilization, the institutions, and the psychology of the people. The needs of the learners are, however, in large part social, owing to the fact that a child's life is lived almost entirely in human groups. Hence the content of the curriculum must be built directly out of group needs, that is, out of the culture of the people.

But the culture of a people is found in the interests, aptitudes, and activities of the children themselves, as well as in those of out-of-school elders. Thus curriculum-making will recognize the twofold nature of the people's culture; it will take account not only of its social characteristics but also of the individual needs of its component members. That is, young people shall study not only the problems of their local and national groups but also their own personal childhood problems. So far as is possible, their activities shall be merged into the natural activities of community and nation. In the fullest sense, therefore, the curriculum constitutes a firsthand study of the culture of the people.

The Curriculum and Society

What, then, is this "culture" of the people, of which we make so much? It is in no narrow sense that we shall use the term. On the contrary, we shall mean all that the people do and are, their external physical civilization and their inner psychology. Thus the concept "culture" is all-inclusive, embracing all the folkways of the people, and their moods, their attitudes, and

their points of view. It embraces the inner life of the individual as well as the interactions of two or more individuals who comprise group life.

The Three Aspects of a People's Culture

Throughout this book we shall refer constantly to the culture, the "racial experience," the "social heritage" of our people. Because this is such a complex concept we shall need to illustrate it and define it carefully. In launching our critical study of education it is especially important to grasp the scope and details of this concept.

Perhaps it will be easier to understand if we note at the outset three fairly distinguishable phases of the culture of a people: first, their external, physical civilization; second, their institutions; and third, their subtle "psychology." In making these distinctions let us be forewarned, however, that we do so only for purposes of convenience in study. In reality the ongoing, shifting stream of social life is a weld of all three of these aspects of culture. The physical production system, the family and government systems, the carrying on of social organizations—all are propelled and guided by the drives and taboos of the people. Hence no phase of culture exists by itself; all are fused together. For convenience in explanation, however, it will serve our purpose to distinguish them as separate aspects.

I. THE PHYSICAL CIVILIZATION THE SURFACE ASPECT

There is first the obvious surface civilization, which embraces the physical means of producing and distributing things. In an industrial civilization this means mechanized farms and mines, power-driven factories, power plants, railroads, motor transportation, telephones and telegraph, radio, stores, banks, and the like. Taken all together, these constitute the economic system by means of which food, shelter, and clothing are produced and other physical things are done. These, then, make up the surface civilization of an industrial people.

The surface civilization of an agricultural country, such as China or Mexico, on the contrary, reveals few of such paraphernalia. Instead one finds tools operated by muscle, wind, or water power, handicrafts in place of machine production, animals and men as beasts of burden, all kinds of nonmotor transportation, and direct face-to-face bargaining as the principal means of exchanging goods. There are also, of course, many less populous and less developed agrarian cultures than these — for example, those of the "grass" peoples of the Asian steppes, of the nomads of the Arabian and African deserts, of the less advanced peoples of central Africa.

But whatever the complexity of the surface civilization of a people, its physical ways of living are its most obvious cultural level. Throughout our study of the curriculum and curriculumconstruction we shall note the important task of building the study of the physical, surface data of world cultures into the entire school program.

2. THE SOCIAL INSTITUTIONS

Beneath the physical civilization, at least partially hidden from casual observation, is another aspect of a people's culture - namely, that of the social institutions. Scientific students of society are in less agreement concerning these than they are concerning the surface forms of production and distribution. In spite of the partial disagreements, however, three types of social institutions can be quite clearly distinguished.

a. There are first the political and social institutions — for example, the family; government; economic, political, and social organizations; and such means of disseminating ideas as the press, the movies, and the radio. These, as with the industrial and agricultural systems, vary in different cultures. The Western one-generation family, for example, may be contrasted with the clan-family of China. Similar differences emerge in modes of government; for example, the presidential-representative democracy of the Americas may be contrasted with the clan-family village government of China. Moreover, both may be contrasted with the various parliamentary democracies of western Europe, the Fascist dictatorships in Italy and Germany, and the Soviet dictatorship in Russia. Other contrasts in institutions are found in the labor unions, chambers of commerce, and employers' associations of the industrial West and the guilds and master organizations of the other types of culture. However, everywhere, after its unique fashion, economic life is institutionalized.

b. More hidden from superficial detection but nevertheless subtly molding the culture of the people is the second kind of "institution." Of its various forms, perhaps language, measurement, and systems of record-making are of the greatest importance. Later we shall study more fully the ways in which the language of a people and its other means of expressing ideas play tremendous roles in molding the temperament, the outlook, the very personality of a particular people.

We shall consider, for example, how the precise thinking of industrial America and Europe has been made possible by our elaborate and highly organized languages, our Arabic number system, our schemes of measurement, and our higher mathematics. We shall contrast these with the dwarfed languages and the clumsy and inexact schemes of number measurement and exchange of less developed peoples. We shall come to understand that without these refined modern instruments the scientific method of thought and its application to mechanical invention in the nineteenth and twentieth centuries could not have developed. In other words, we shall see the highly important connection between this kind of "institution" and the physical civilization and thinking of a people.

c. There are still other social institutions that contribute to the culture of a people — for example, the rituals of churches, lodges, schools, and colleges; forums and other parliamentary and elective procedures; the ritual of courtesy in social life; codified food habits, and ways of dress, speech, recreation, and the like. Later we shall examine more fully the direct relation between these varied forms and types of institutions and the complexity and efficiency of a particular culture.

3. The Determining Psychology and Philosophy of the People

Shaping both the economic system and the social institutions of a people are still more subtle and fundamental drives and traits. Although hidden from superficial study, this psychological aspect of a people's culture is the most directive of all. It determines what a people want, and hence what they are.

Because the school curriculum is to be constructed out of the culture of the people, it will be greatly molded by their social psychology and philosophy. For example, to interpret adequately the economic system and the social institutions of the culture of America, our youth will necessarily study the role of such concepts and attitudes as freedom, equality of opportunity, justice, patriotism, and the like.

There are many psychological factors. First and foremost is desire — desire for economic and social security, for better food, clothes, recreation, homes, conveniences, and the like; desire for the social approval and respect of neighbors; and many others.

Second is the general climate of opinion of the community and nation. By "climate of opinion" we shall mean the mental and emotional atmosphere that marks the social life of a group. It is set by the attitudes, points of view, and ideas of the dominant persons and cliques within the group. For example, one or more dominating persons ordinarily set the tone and standard of a family's opinion and beliefs. Certain aggressive personalities do the same thing for neighborhood clubs and groups, labor unions, churches, lodges, and all other social organizations. Thus by means of the social interplay between the members of groups a characteristic temper, or "climate," comes to mark both the groups and the constituent members.

These groups move, furthermore, in the setting of certain recognizable "American" ideas and attitudes — a "climate" that, although showing differences in various regions, reveals nevertheless certain characteristics that can be called American. There are, for example, the individualistic idea of "success" which lures every American on, the ideas of industriousness and

thrift ("Work hard and save for a rainy day"), the idea of "I'm as good as you" or "Don't tread on me," and the ingrained idea of the "rights" of the individual. Conversely there are, of course, the ideas of "service," of "joining," of being a regular fellow, of not running counter to the ideals of the community, and many others.

Other psychological factors also play a determining part in making Americans what they are. There are, for example, the high momentum of modern transportation and communication and the rising tempo and rhythm of city life. There is, correspondingly, the increasing restlessness of the people. They demand great speed and "efficiency." They thrill over mass athletic and marathon contests. They hurry from place to place, traveling more than any other people. There is also the speculative mania, the "get something for nothing" attitude that peculiarly grips our people. These tendencies are all related to an increasing superficiality in work, a decline in honest craftsmanship and handicraft.

These attitudes, ideas, and tendencies, examples of the pervading emotional life of our communities, are important psychological elements of American culture. Taken all together they constitute an important base for it. Regional differences, caused by differing geographic factors, social backgrounds, and historical development, also exist and add to the psychological complexity of our culture.

These, then, are illustrations of the three chief aspects of American culture. They show, even when thus briefly stated, the scope of the social setting out of which the curriculum must be constructed.

The Curriculum and Child-personality

But, important as our social heritage is, to base a curriculum on group life alone is not enough. It is not enough even though the psychological "level" of the culture is painstakingly considered. Education should be primarily devoted to the development of new Persons. Indeed, only in this way can it help to develop and perpetuate the culture of a people. Hence the teacher and the curriculum must both take cognizance of individual personality as well as of the social institutions of a people. An educational program is therefore as dependent upon the facts of individual personality as upon the content of group culture. Indeed, the very crux of civilization itself is the interplay of mind on mind, the impact of human fears upon human desires. These interactions constitute the very essence of the civilization of a people. They determine their institutions and their psychology.

Now personality is such a complex thing that basing a program of education upon it will impose drastic requirements of understanding upon the teacher and the curriculum-maker. Note in briefest outline the wide range of factors which, welded together, comprise the personality of an individual:

- r. Factors of physique and physiology. A very short child or a tall one,
 a "healthy" or a "sickly" one, a beautiful or a malformed one
 each physical characteristic has its influence on the total response of the individual.
- 2. Factors of intelligence. General mental-motor ability as revealed in abstract intelligence, mechanical intelligence, and social intelligence.
- 3. Factors of motor response. Energy, control, perseverance; uniqueness of motor responses as in walking, speaking, gesturing, and the like. From factors of motor response we characterize personalities as lethargic or dynamic, erratic or well-balanced, vacillating or purposive, and so on.
- 4. Factors of temperament. Breadth or narrowness of emotional range; self-assurance or lack of it; a temperament that is phlegmatic, optimistic, irritable, changeable, or the like.
- 5. Factors of drive. Drives, or desires, for food and sex, for security, for social approval. Because, as one writer put the matter, "The course of drives does not always work smoothly," there arise also factors of self-defensive traits, such as seeking compensations for disappointments, rationalizing, and the like.
- 6. Factors of social participation. The foregoing factors work them-

selves out in each individual's peculiar adjustments to the social-human world about him, his resulting personality being, for example, self-seeking, aggressive, aggrandizing, or regressive, nonsocial, even antisocial.

This outline is intended to serve only one purpose — namely, to illustrate the great scope and complexity of human personality, so as to bring into clear relief the teacher's problem of understanding human nature and human behavior.

To repeat an earlier statement, these individual traits and types of behavior are the very foundation of the social behavior that we call the culture of a people. Like the more conspicuous aspects of that culture, they are a basic part of the foundation of the curricular structure. At the appropriate time, therefore, we shall study carefully the relation of psychology to the school curriculum.

The Curriculum and the Teacher

Last, but not by any means least, in considering briefly the chief factors of the educative process — society, the child, the curriculum, and the school — we come to the teacher. It will be granted by all that the teacher really is the school — the teacher makes or breaks the educative process. It is, or should be, the teacher who makes the curriculum, who plans the activities and selects the materials by means of which education goes on. It is the teacher who is with children and youth constantly, quietly orienting them to their world, directing them in what to do, checking them up, diagnosing strengths and weaknesses, counseling. It is by radiation from the teacher's example and precept that the school creates the attitudes of young people. It is by a kind of intangible osmosis of meaning and emotion that a dynamic teacher sensitizes young minds and temperaments. There is, indeed, no aspect of the entire range of the student's life that the teacher does not touch.

In our later study we shall, of course, recognize fully the role of others in the educative process and especially in the construction of the school curriculum. We shall see, for example, the part played by the leadership of the administrative officers and of the specialists in the making of the curriculum. But, as we have said, in the last analysis it will be the teacher who will determine the success with which the school program meets. In a very real sense, therefore, this book is written for those educational workers who stand closest of all to the persons being educated — that is, for the teachers.

The Educational Worker and the Study of Modern Culture

These, then, are the chief factors of the educative process: the culture of the people, the individual's capacity to grow, the artist-teacher, and the curriculum, or environment, which is subtly organized as the supreme intermediary between the individual and the surrounding culture. Upon two of these factors, culture and curriculum, the discussions of this book will be focused.

Since it is clear that the educative environment — the curriculum — really consists in the organized social life of the people itself, we shall necessarily concentrate our study upon that. No longer can the educational worker be merely a student of the psychology and pedagogy of childhood and youth, indispensable to the sound development of educational practice though that may be. He must be, first and foremost, a student of the culture of his people. Indeed, the adoption of that point of view will guarantee that he will become also a student of personality. Human activities are both social and asocial, but undoubtedly the preponderance of them consist in the interactions of individual personalities. Hence the social program becomes inevitably the central strand of the school curriculum. Hence, also, the study of social life will concentrate the creative energies of the educator upon the very crux of the educative environment.

These generalizations point to the initial task of our study and correspondingly of this book — an introduction to modern society, its contemporary folkways and problems, and the social trends which produced it. The curriculum-maker will succeed in designing activities and materials for the sound education of youth only to the extent that he builds them directly out of the culture of his people. And to do that he must know the culture of his people. Difficult though the task is, he must understand this new Euro-American industrial-democratic culture which is spreading around the entire globe. He must know not only its surface economic system but its basic institutions and directive psychology as well. He must be dynamically aware of its crucial issues and problems.

Our Need to Study History

But the study of these problems cannot be confined to the contemporary scene. Every aspect of modern life today is changing swiftly, and in order to understand it and to build the school curriculum in accordance with it the educational worker must see it changing. This can mean only one thing. Educational workers must become students of the history of our total civilization, not merely of the history of school practice and theory. Moreover, they must become not merely students of the kind of history of which we commonly think — for example, the history of political parties, Presidential administrations, legislative enactments, and similar superficial minutiae. They must also study basic economic, political, and social problems and trends. The school program has little to do with superficial history, but it has much to do with the fundamental problems of modern peoples.

Since we must conserve our space in this brief introduction to the curriculum and curriculum-making, we shall devote our attention in the main to the social trends which produced our contemporary industrial civilization and its problems. To that end we shall seek answers to such questions as these: What kind of economic system has the Euro-American created? What is that economic system for? What are the factors in its development which account for the deficiencies of our economic life? What, indeed, are these deficiencies?

We shall seek answers to similar questions about government. What are the underlying ideas and principles upon which the world's various experiments in democracy are based? Where did these ideas come from? What are the chief trends in the development of our political institutions?

We shall seek, too, an honest and sane approach to fundamental questions of family life, the stratification of society into special groups with special-group interests, the changing social organizations of the people, the formation and control of public opinion, and the like.

Most important of all, we shall try to understand the American himself, to know his subtle psychological traits. What are the real standards of conduct which three hundred years of development on the North American continent have produced in the American? What is this "American tradition," of which so much is made? What is the significance of "rugged individualism," of the "success" doctrine, which we are warned is undermining our national life, of *laissez faire* as a guiding theory for industry, business, and government?

Only by understanding these problems and ideas can we set up clean-cut objectives in the school. Only thus can we decide what kind of person education should seek to produce, for the culture of the people molds personality more thoroughly than can any consciously organized educational scheme.

It is clear that the school must take a position in regard to these fundamental questions. The search for answers will expose the deepest roots of our American culture and will show, too, how this culture is now being transformed by the startling changes of the present. The answers to the questions, therefore, underlie any thoughtfully constructed curriculum devised in and for this emergent culture.



Part II

MODERN INDUSTRIAL-DEMOCRATIC CULTURE

We Must First Study the European Roots of American Life

IT IS not the proper function of this book to attempt a history I of our industrial society or of the intellectual and political movements which gave rise to it. This chapter and the next one. however, will introduce the study of this society by presenting a succinct synthesis of its chief trends and conspicuous ideas. Our brief outline must, of necessity, carry us into European backgrounds. The foundations of American culture are essentially European, and therefore a feeling of kinship with European culture is the first requisite to an understanding of our own. It was Europe that first developed the propitious combination of highly developed languages, instruments of measurement, and higher mathematics which made possible a precise scientific method of thought. It was Europe that brought forth the powerdriven-machine method of producing goods. It was Europe that devised the modern concepts of political democracy with which men have since experimented the world over. Thus, because it was from western Europe that new ways of thinking, of governing, and of self-expression spread to the other continents of the world, we must turn first to the European antecedents of American civilization.

CHAPTER III · THE RISE OF THE NEW INDUSTRIAL SOCIETY

The Factors That Produced It

No one factor alone brought forth the novel European civilization and implanted it on every continent of the earth. On the contrary, only the concurrent action of many different factors produced it. Six of these are of greatest significance. Because our space is so limited, I can only summarize very briefly what I have described much more fully in another place.¹

FIRST: THE EUROPEAN INHERITED THE "SCIENTIFIC" KNOWLEDGE OF THE ANCIENTS

More than six thousand years ago, according to our most recent archaeological records, men lived in highly advanced ways of civilization. In the river valleys of China, India, the Near East, and northern Africa, at least, men lived in settled ways, with developed systems of agriculture and handicraft, government, and architecture; but they had no power but hand power with which to drive their "machines." They knew how to count and to measure, and they spoke together with elaborate languages; but they did not have these abilities developed with sufficient elaborateness and precision to permit scientific methods of thought. Their knowledge was essentially practical; it was aimed at the carrying on of individual and group life.

¹ Harold Rugg, Changing Governments and Changing Cultures. Ginn and Company, Boston, 1932. See also Changing Civilizations in the Modern World (Ginn and Company, Boston, 1930) and The Great Technology (The John Day Company, New York, 1933).

Not until the era of Pythagoras, Plato, Aristotle, and Euclid did men devise more exact mathematical ways of thinking, and even these advances in the onward march of man's creative thought were halted by the decline of the Greek and Roman civilizations. For a thousand years, while the simpler but sturdier stocks of the northern-European peoples — especially the Norse and Slavic groups — were settling in what later was to be Germany, England, France, and the lesser national states of Europe, original thought was stunted. Although the creative mind found its outlet in a great medieval church architecture, and near the close of the period in an astonishing outburst of creative expression in the arts, its scientific advance did not take place until the turn of the sixteenth century.

Second: National States and National Languages
(1100-1500 a.d.) Set the Stage
for an Intellectual and Scientific Revolution

This startling development in creative thought could not have taken place if the cultural background had not been appropriate. It is significant indeed that the more exact methods of measuring, recording, and thinking did not emerge until after 1500 A.D. The reason is, of course, found in a complexity of factors, no one of which can explain the lack of development during hundreds of years.

We must remember, however, that before 1500 A.D.—between the breakup of Charlemagne's empire at the beginning of the ninth century and the swift development of the scientific movement in the sixteenth century—several national states and several national languages emerged from the flux of life in Europe. It was especially during the last four hundred years (1100–1500) of this period that feudalism declined. Powerful lords subdued their lesser neighbors and welded duchies, counties, baronies, free cities, and manors together under single rules. For example, as a result of almost constant warfare in the region from the Seine to the Mediterranean, the entire terri-

tory, known in recent centuries as France, came to be ruled by one noble family and the subjects within it came to recognize their "nationality" as Frenchmen. Similarly, little warring kingdoms of Celts, Angles, Saxons, Danes, Normans, and Britons became the kingdom of England. During the same interval the Christian rulers of Castile, León, Aragon, and Navarre gradually extended their control over enlarging areas and, driving the Mohammedans across the strait into Africa, created the powerful kingdom of Spain. Thus in western Europe, through the coalescing of fiefs and principalities, national states emerged for the first time.

A contributing factor of great importance, both to the development of the nations as such and to the emergence of the scientific revolution, was the development of national languages and literatures in each of these countries. The unification of local groups and their self-recognition as Frenchmen, Englishmen, Spaniards, etc. could not have been brought about merely by the conquest of weak rulers by stronger men and their mercenary armies. It was only as the people of a region came to speak and think in approximately the same language and rhythm that they felt a common bond of allegiance. It was only by speaking French, and comparatively the same French as their distant neighbors, that the people of a "France" came to recognize a common "fatherland." It was through the evolution of the English language, literature, and arts that men really came to accept their loyalty to "England."

Thus a complete study of the factors producing the new industrial civilization in Europe would include not only political boundaries, conquests, and subjugations, and the long, devious evolution of languages, but also the role of great writers, traveling bards, and troubadours. It would show the way in which a deep emotional spirit gripped these peoples of western Europe as their epic poems, prose romances, Biblical literature, records of warriors, and the like gradually resulted in written literatures. So it was that the rise of national states and of national languages and literatures duplicated itself in the histories of England, France, Spain, and, later, of Italy and middle Europe.

THIRD: AFTER 1500 A.D. THE SCIENTIFIC REVOLUTION

Then in an astonishing movement of original invention came the perfection of more accurate measuring instruments. The mariner's compass, which had given sailors the courage to venture farther and farther out upon the seas during the fourteenth and fifteenth centuries, was followed by the pendulum clock, with which men could measure moving events; a perfected telescope, which brought the heavens closer to their eyes; the microscope, which laid bare the ancient history of rocks and plants, the blood stream, bacteria, and the like; the thermometer and the barometer, which measured temperature and the pressure of the atmosphere. These, of course, were only a few of the conspicuous tools perfected by the inventive genius of enthusiastic Europeans during a period of about a century.

No sooner were these new instruments made than Galileo, Boyle, Otto von Guericke, and their company piled up mountains of facts with them — facts concerning the movements of heavenly bodies, facts concerning the human body, plants, animals, the mountains and the valleys of the earth. But they were unrelated facts. Altogether there was an overwhelming complex disarray of facts which for comprehension required reduction to order. It was the *relation* between the movement of the sun, the earth, the planets, and the stars which men needed to discover. It was the *relation* between altitude and pressure, between physical conditions of temperature, length, what not, that was important. It was the *relation* between physiological phenomena that men needed to grasp in order to explain life.

Therefore, in those incredible seventeenth and eighteenth centuries, René Descartes, Isaac Newton, Gottfried von Leibnitz, to name merely a few creative geniuses of abstract thought, produced the analytic geometry, the calculus, and other higher-mathematical ways of treating measured facts. Thus it was possible in these same astonishing times for Descartes, Francis Bacon, and others to classify systematically the growing body

of scientific knowledge and to create a philosophy of thought. This, then, was the concluding phase of the intellectual revolution which began in the thirteenth century with Roger Bacon's exhortation "Look at the world and experiment!" and produced by the end of the seventeenth century the elements of the scientific method.

So it was that laborious discovery, through the cumulative findings of many frontier thinkers, native to many civilizations and eras throughout six thousand years of recorded history, brought forth in our modern times the new ways of thinking which we call scientific. As a consequence, we substitute hypothesis for faith or prejudice; that is, we generalize from the best possible classifications of available measured facts. Instead of resorting to superficial observation, we now employ measuring instruments to guarantee the objectivity of our facts. No longer are we content with intuition alone. Hunches are tested as hypotheses; facts are measured with exact instruments, multiplied in number, validated by thorough description and repeated experiment, and classified for the purpose of discovering relationships. If this is done, generalizations in the form of scientific law can be drawn which confirm or refute our original hypotheses. Indeed, these generalizations now are regarded merely as somewhat better tested hypotheses.

Nothing in man's intellectual advance through recorded history has contributed more definitely to his production of the new civilization of the nineteenth and twentieth centuries than the evolution of this scientific way of thinking by the Europeans between 1500 and 1800 A.D.

FOURTH: A SLOWLY GATHERING COMMERCIAL REVOLUTION CREATED THE IMPETUS FOR THE MORE EFFICIENT PRODUCTION OF GOODS

In the meantime the physical explorations of the fifteenth and sixteenth centuries had changed the geographic importance of western Europe and had made it the very center of a new world trade. Columbus's pioneering across the Atlantic produced within a comparatively short time a commercial revolution of world-wide importance. The British Isles, isolated on the western fringe of the trading world, had been for centuries but a jumping-off place, a casual port of call for European vessels. Now in the century after Columbus's epoch-marking discovery they became the very center of international buying and selling. The sphere of trade was extended from the restricted confines of the Mediterranean Sea, the Baltic Sea, and the North Sea to include all the continents and oceans of the earth. As that happened, and as Europeans built their colonial outposts on the shores of North and South America and great centers of trade emerged at New York, Boston, Philadelphia, Charleston, New Orleans, Buenos Aires, and Rio de Janeiro. it was inevitable that the British Isles should become the center of a rich world trade. Long habituated to a seafaring life, the vouths of Britain risked their lives and merchants gambled their fortunes to build up British trade and with it the far-flung British Empire.

It is no part of the historical material of this book to detail the exploits of their merchant marine or to show the manner in which the Union Jack was securely planted in North America, in Africa, Asia, Australia, and on island merchant and naval stations round the earth. Let us recall merely that, in the course of the three-centuries-long struggle for commercial and naval supremacy, England defeated Spain in the sixteenth century, Holland in the seventeenth, and France in the eighteenth, thereby becoming Mistress of the Seas, the pivot of world trade, and a world empire embracing one fourth of the land area and one fifth of the people of the earth.

It is important thus to review, at least in outline form, this commercial revolution which accompanied the intellectual and scientific revolutions, for together they were the forerunners of the Industrial Revolution of the nineteenth and twentieth centuries.

FIFTH: THE IMMEDIATE IMPETUS TO INVENTION THE RISE OF THE MANUFACTURING-TRADING MIDDLE CLASS OF "CAPITALISTS"

During the sixteenth and seventeenth centuries there was an increasing overseas demand for goods; the commercial revolution was having its effect on home industry. A rapidly growing handicraft developed throughout the countrysides of England and on the continent of Europe, which in turn added to the rapid growth of towns. Indeed, the movement away from rural agriculture and toward the building of handicraft methods of manufacturing in towns had been under way for several hundred years.

Even by 1700 England could boast a considerable body of skilled workers — ironmongers, patternmakers, furniture-makers, and the like. Of all the trades, however, the most important was the manufacture and exchange of cloth. Long before 1700 two factors had produced a well-developed clothing industry. The Black Death (1348–1349) had left a scarcity of farm laborers and had made sheep-raising profitable because one man could tend many sheep. Furthermore, British landowners were determined to build up the sheep-raising industry. Thus, with wool plentiful, many people turned to spinning and weaving. Early clothiers traveled from cottage to cottage, village to village, supplying the workmen with raw materials and collecting the finished yarn and cloth. Eventually they set up "factories" in which hundreds of spinners and weavers ran by hand and foot their spinning wheels and looms.

It was the clothiers, cabinetmakers, potters, hardware-makers, glass-manufacturers, printers, bookbinders, jewelers, papermakers, to name only a few of the middle-class merchants, who gave support to Napoleon's contemptuous estimate of the English people of 1800—"a nation of shopkeepers!" It was these people who became the "capitalists" of modern England and who out of their "surplus capital" bought raw materials, hired workmen, and distributed manufactured products. It was these men, too, who had sufficient accumulated wealth and sufficient

imagination to see the profits that would accrue from the building of central factories; and it was the sons and grandsons of these people whose surplus wealth was to provide the capital with which costly engines, factories filled with machines, railroads, ocean-going steamships, power plants, and the like were to be built in the nineteenth and twentieth centuries.

SIXTH: A PROPITIOUS "GEOGRAPHY" SET THE EUROPEAN STAGE

But even these favorable circumstances would have been insufficient to produce the Machine Age without the cooperation of one other factor — namely, a propitious "geography." For Europe (North America is a close competitor) represents one of the world's best combinations of the geographic factors needed for the production of a power-driven machine civilization. Everything was ready — climate, lay of the land, winds, soil, presence of fuel and metals, the continent's indented coast line with many harbors, natural means of transportation.

Note Europe's variable climate, the ideal alternation of warmth and coolness. It provides precisely the right length of growing season for wheat, vegetables, and other foods, and through its ups and downs stimulates human beings to maximum physical effort. Note this unique continent — the only one in the world which has no deserts and no jungles, and in which mountains steal from man but a small fraction of the productive area which the physical evolution of the earth passed on to him. A continent, moreover, in which mineral richness of the subsurface paralleled fertility of the surface soil itself. Here is one of the world's richest deposits of coal and iron, making possible England's head-start in the development of powerdriven machine civilization, and energizing England, France, and middle Europe with the Black Country, Ruhr, Saar, and Kraków fields of metal and indispensable fuel. Note the shape of the continent, its many navigable rivers, and the fact that no point of its interior is more than six hundred miles from the sea. How sharply the narrow contour contrasts with the vast distances in Asia, Africa, and the Americas!

Looking back upon the last two centuries of industrialism these factors seem to have predestined Europe to be the cradle of industrial civilization.

This Right Combination of Factors Launched the Machine Age

Thus by the eighteenth century the pioneering stock of Nordics, who inhabited northwestern Europe, were at last possessed of exactly the right fusion of factors necessary to produce a power-driven civilization. They had scientific knowledge, partly inherited from the ancients and partly built by the labor of their own imaginations. They had national states and languages and literatures, which made possible an intellectual revolution and the development of the scientific method of thought. They had before them a new world, discovered by explorers with their new measuring instruments and brought into commerical relationships by a growing merchant class. They had a favorable geography. They produced a new manufacturing and trading class of men, the so-called Middle Class of modern times - intelligent, ambitious, energetic, daring. And these people produced the capital necessary to finance the large-scale production of goods.

It is this total combination of factors, therefore, rather than any one of them that provides the clear-cut answer to our original question: How did it happen that our Euro-American civilization was the first in the history of the world to operate as a power-driven machine culture and to experiment with political democracy? And it is this combination of factors that we must weave into that description of modern society which we are now making the nucleus of the materials for our new educational program.

With This Background the New Industrial-Democratic Civilization Was Suddenly Produced

Then with startling suddenness after 1700 — within two hundred years on a time-line covering millions of years of development — the Euro-American created a totally new way of life. On the economic side it was based upon mechanical power harnessed to machines. In sharp distinction from the agrarian order it was essentially a power-driven machine civilization; hence we call it "industrial." On the political side it included many experimental varieties of parliamentary government. Government by Many Men, with the consent of the governed, increasingly supplanted One Man dictatorial government; hence we call it "democratic." Although the new civilization has many facets, these two concepts — industrialism and democracy — are of supreme importance. Therefore we shall denote the current way of living as "industrial-democratic" culture.

Moreover, in building programs for the education of youth. we shall never lose sight of the fact that this industrial-democratic culture is novel, utterly unlike any that has preceded our own historical epoch. It is new in its successful use of mechanical power as an efficient substitute for muscle and other natural power. It is new in harnessing this power, in moving things, in lifting, pounding, digging, assembling, tearing down — in short, in all the technical arts of construction. It is new in its swift and powerful transportation and its instantaneous intercontinental communication. It is new in its complexity and its world-wide interdependence. It is new in its multiplication and concentration of population in urban manufacturing centers. It is new in its rational methods of thought and their cumulative application to economic, political, and social life. It is new in its attitude toward the family and other forms of group life. It is new in its music and dance, its graphic and plastic arts, its theater, its literature, and its crafts. New in fundamentals and

new in details. Thus here is a theme that should form one of the intellectual foundations of any program of education for the youth of the modern world.

Our Need for a Clear Outline

Since this is primarily a book on education and is only incidentally on modern cultures, this is not the place in which to detail the history of mechanical invention, or methods of corporate enterprise, or experiments in democratic government or social living. These are reported fully in a vast library of the new social sciences.¹

Moreover, the curriculum-maker's primary interest is in the chief movements and the basic ideas and factors that produced the new civilization and our current problems. The movements and concepts will form the intellectual skeleton of this book. The details of the past centuries of development constitute a baffling maze, to be reduced to clear order only by the special student of the social sciences. But the chief contours of social change can be comprehended clearly by every educational worker. Indeed, the current economic and political problems will be solved by the parliamentary method of intelligent consent only if the educational workers of the world make themselves masters of the deep-running concepts and factors of industrial-democratic culture and build their educational program around them.

What, then, in succinct outline, are these basic movements and ideas?

¹ See, for example, Lewis Mumford's Technics and Civilization (Harcourt, Brace and Company, New York, 1934), Charles and Mary Beard's Rise of American Civilization (The Macmillan Company, New York, 1927), and other volumes by them, and Stuart Chase's Men and Machines, The New Deal (The Macmillan Company, New York, 1929, 1932), and others of his works. I have attempted a synthesis of considerable extent in the six volumes of my social-science course: see especially Changing Governments and Changing Cultures and Changing Civilizations in the Modern World (Ginn and Company, Boston, 1932, 1930). See also The Great Technology (The John Day Company, New York, 1933), by Harold Rugg, and Social Reconstruction (The John Day Company, New York, 1933), by Harold Rugg and Marvin Krueger.

Three Revolutionary Movements

In the thousand-year-long background that we have outlined, Europeans developed in the two centuries following 1700 three principal movements and through them produced the new industrial-democratic culture:

First: the building of a power-driven machine technology.

Second: the invention of the corporation and its control over money, credit, and men.

Third: the development of political democracy, based upon the concept of freedom.

1. The Building of a Power-Driven Machine Technology

Hundreds of creative geniuses in England, America, France, Germany, and other countries contributed their bits of invention to the total physical structure of industrialism. Recall the two centuries of co-operation by Papin, Newcomen, Savery, the Marquis of Worcester, James Watt, and many others that produced the first practicable (although terribly inefficient) steam engines. Recall, too, the wizardry of Faraday, Morse, Hertz, Bell, Edison, Marconi, Diesel, and a host of others that gave us the more highly efficient gas engines, the gigantic electrical generators, and the central power stations of today.

The romance of modern transportation and communication is a thrilling narrative of the experiments of Murdock, Trevithick, Hancock, Evans, Stephenson and Stevens, Cooper and Fulton, Selden, Haynes, Duryea and Ford, Gifford, Santos-Dumont, Zeppelin, Lilienthal, Langley, the Wrights, and Curtis.

A great world-wide textile industry grew out of the early efforts of Kay, Hargreaves, Arkwright, Crompton, Cartwright, Slater, Whitney, Lowell, et al.

The heavy industries were made possible by the revolutionary discoveries in the making of steel and other metals of Kelly, Bessemer, Sturtevant, Dudley, and others.

The revolution in cultivating and harvesting machinery produced by Newbold, Wood, Lane, McCormick, Deere, and their

company mechanized agriculture and released millions of land slaves from the farms of the Western world.

The garment and shoemaking industries were made possible by the equally clever creations of men like Howe, Singer, Beard, and McKay, and thousands of unnamed technicians in the modern research laboratories of Europe and America.

Nothing is to be gained by an elaborate cataloguing of names. Suffice it to say that through the efforts of thousands of dogged fanatics of industrial invention the two-centuries-long First Industrial Revolution (roughly stretching from 1700 to 1900) laid the foundation for the truly efficient machine technology which the Second Industrial Revolution (1900———) has perfected. Thus men have been given fairly competent machines to aid them in producing a livelihood: power-driven machines to plant, harvest, and prepare their food; machines to make their clothing; machines to build, furnish, heat, cool, and clean houses; machines to transport people and things, to send messages, to make records, to print reading matter, to entertain. Thus it was that the foundation was laid for the power production of goods.

2. THE CONCENTRATION OF THE NECESSARY CAPITAL IN THE CORPORATION

But the power production of steel, cloth, fibers, fertilizers, and the like could not have been achieved by clever invention alone. To build and to operate mammoth generators, power stations, and automatic factories requires enormous amounts of capital. In preindustrial days such sums as were needed were assembled by the merchant companies, but with the coming of large-scale production vastly greater financial resources were needed. And these were supplied after the middle of the nineteenth century by the great horizontal and vertical "corporations" (joint-stock companies, cartels, and trusts). These made it possible to assemble the large amounts of capital required to build and to operate the vast producing plants. It was the corporations' gigantic amounts of capital that permitted men to bring together under one direction the various types of related industries which

were indispensable to the production of a completely manufactured article. It was the corporation that made interchangeable manufacturing an actuality, with its standardization of parts and processes, its specialization of mechanized labor, and its production of things in million lots. It was the corporation that made the close control of government by business possible in the latter part of the nineteenth century. And it was the corporation that took the control of the production-distribution system out of personal, responsible human control and put it into hidden, irresponsible places. Hence its very great importance to our study.

In the social-science program of the schools, therefore, we shall show how the corporation made possible

- 1. Increased and large-scale production.
- 2. Interchangeable and integrated manufacturing, bringing allied industries under a single effective control.
- 3. Concentration of control over money, credit, and prices.
- 4. Changes in the character of competition, the establishment of monopolies, with advantages in bargaining power when dealing with labor, sellers, and consumers.
- 5. The intense specialization of labor and the decline of craftsmanship.
- The building of an impersonal business organization, with consequent inability to place responsibility for acts, decisions, or policies.

Out of these two movements, aided by the idea of the freedom of the individual to compete unrestrictedly in the industrial world, came the six indispensable physical factors that produced our machine technology. Merely tabulated, these are

- I. Giant and efficient generators in central stations, transmitting power over long distances.
- 2. Machines of great force and intricate cleverness of manipulation.
- 3. Vast and precise machine tools with which to make other machines.
- 4. Precise measuring instruments.
- 5. The mechanism of efficient transportation and communication.
- The corporation, with its capital, its mechanism of assembling parts to produce completed articles of consumption, and its exchange of goods.

3. THE INDUSTRIAL COUNTRIES EXPERIMENT WITH INDIVIDUALISM IN BUSINESS AND IN GOVERNMENT

The New Ideas That Propelled the Building of the Production Systems

What was the motive power behind this gigantic exploitation of hitherto untouched continents? It lay, of course, in the desires of the people for a "better living" and in their guiding philosophy, attitudes, and ideas. As we look back on the three-hundred-year-long conquest of the continents, it is clear that the guiding philosophy was what ex-President Hoover called "rugged individualism." Each individual was to take care of himself. In business, laissez faire — every man for himself — was the slogan. Government was to keep hands off.

The establishment of this philosophy was not achieved easily or quickly. It was, indeed, the outcome of several centuries of struggle between rival economic and social groups. During this long period autocratic governments, ruling by "divine right," were gradually replaced by others representing a somewhat larger proportion of the people. That is, the peoples of the industrial countries experimented with various kinds of "political democracy."

It is of great importance that our youth understand very clearly the nature of these experiments with more democratic forms of government. Only by doing so can they grasp the ideas that propelled the industrialization of the earth.

The Role of the Idea of Freedom

Our youth must study the world's march toward political democracy, therefore, paying special attention to the ways in which the growing idea of freedom affected every aspect of life. For example,

r. Freedom of movement: the right to move about, resulting from the abolition of serfdom, and the possibility of moving about because of new methods of transportation and communication. 2. Freedom of worship: religious liberty.

3. Freedom of speech, press, and assemblage, trial by jury, and habeas corpus: civil liberty.

4. Freedom to participate in the management of collective affairs, to vote and to hold office: political liberty.

5. Freedom to exploit natural resources and people by individual competition: laissez faire in economic life.

6. Freedom of labor to organize for collective bargaining.

Freedom to Compete: Laissez Faire

What, then, was the relation between the growth of political democracy and the development of industrialism? The two movements—the political and the economic—advanced together; in reality they were phases of a single trend. Recall especially the role of that idea of freedom in the economic world which goes by the name of laissez faire.

In the latter part of the eighteenth century, while the middleclass businessmen were securing a growing degree of control in European governments, theoretical students of government invented the formula that was to guide the relations of business and government to the present day. This was stated by the historic phrase laissez faire. The phrasing of the philosophy of laissez faire was developed by François Quesnay and his associates in Louis XV's court in the 1760's and 1770's, and was given wide circulation by Adam Smith in his Wealth of Nations (1776). Perhaps no other single theory has played so important a role in modern government as has this one. It encouraged the vigorous exploitation of continents and guided the political action of the dominant business group. For the manufacturers, merchants, and the middle class generally demanded and secured the right to produce and to trade without interference.

The Role of the Middle Class

With the idea of *laissez faire*, therefore, youth should also study the rise to power of the so-called "middle class." It was the middle class that built up the trade of European countries even before the eighteenth century. It was the middle class that led in the development of power-driven machine production. It was the middle class that rose to political power, eventually ousting the divine-right rulers and controlling government.

Recall the twofold composition of this middle class:

- 1. The "upper" middle class—the more well-to-do bankers, merchants, manufacturers, and professional people.
- 2. The "lower" middle class—small farmers, shopkeepers, manufacturers, and highly skilled workers; always aspiring to a position on a higher rung of the economic-social ladder.

A more complete historical survey would show the gradual evolution of the new business governing class.

Recall, first, its early beginnings in England before 1500 and the increasing success of the country gentry in obtaining concessions from the crown — for example, Magna Charta (1215), the Petition of Right (1628), and the Bill of Rights (1689). There was, later, the rise of a rich and powerful merchant class, owing to the commercial and industrial development before 1800 and to the fact that this class gradually secured an increasing representation in government. However, their demands for liberty were for freedom from monarchic rule for themselves, not for civil and political liberty for the rank and file of the people. Thus "representation" was given to perhaps only 1 or 2 per cent of the total population.

Recall, second, the slower rise of the middle class in France and in other Continental countries. In France, for example, in the latter part of the eighteenth century, emerged the upper middle class, the "bourgeoisie." From it came the leadership for the French Revolution; from it also came the pronouncements for a "Bill of Rights" — notably the Declaration of the Rights of Man, which the masses of the people assumed was intended for all. Recall the significant elements: (1) freedom of movement — abolition of serfdom; (2) freedom of speech, expression, press, and the like; (3) government by the consent of the governed; and (4) increased rights concerning private property.

Then, during the latter half of the nineteenth century, this new

manufacturing-trading-financing class advanced to the leading position in government. Youth should study the movement as it took place in England, France, and Germany. Succinctly phrased its development was as follows:

I. In England: the rise of the industrialists in the new manufacturing cities of Manchester, Birmingham, and the like . . . their seeming control of Parliament . . . the Reform Bills of 1832 and 1867 . . . the defeat of the Chartist and other movements of the "masses" . . . the enfranchisement of a larger proportion of the

people . . . gains in civil and political liberty.

2. In France: the somewhat later development of industrialism and the slower rise to power of the industrialists... the middle-class anarchy during the middle of the century... the middle-class "Second Republic," 1848–1852... the middle-class "Second Empire," 1852–1870... the middle-class "Third Republic," 1870... the steady growth of civil and political liberty.

3. In Germany: the slower unification of "the Germanies"... the lag of industrialism until after 1870... the failure of early revolutions (1830 and 1848)... the unification of the Germanies by the "blood and iron" policy of Bismarck... the combined power of the "Junker" landlords of eastern Germany and the industrial barons of the west... the swift rise of Germany to industrial and technological leadership (1871–1914) and the building of a world empire of trade... the absolutism of imperial government, 1871–1918, with the middle-class industrialists and the bankers sharing political control with the Junkers.

Briefly Introducing the Theory of Government by Consent

While the middle class was getting into the political saddle, the so-called "lower classes," that is, the workers (skilled and unskilled), who lived primarily in the new manufacturing cities, began to agitate for protection and for more civil and political liberties. The case for government that would represent all the people — not merely the well-to-do classes — had been made by various "frontier thinkers" from the time of John Locke (1632–

1704). The central idea enunciated by Locke was "government by consent of the governed." This was developed by Rousseau and later thinkers of the nineteenth century, which paved the way for the practical experiments with more representative forms of government.

The Organization of the Lower Classes and the Conflict over Government and Ownership

Our youth should realize that as early as the eighteenth century critical students felt that the struggle for control over government was essentially a conflict over ownership of property. Throughout history one question has been dominant: How shall property be owned? In general, most things have been owned privately. Hence the Europeans launched the Industrial Revolution with that conception of ownership. As this philosophy gave ownership and control to the more ambitious, intelligent, and energetic people, a constant struggle has ensued between "those who have" and "those who have not." From this point of view the history of government has been a conflict over ownership and control of physical things.

Recall the conflicts that arose in the nineteenth and twentieth centuries as a result of this struggle for ownership. There were three outstanding movements:

I. The philanthropic experiments in socialized community government after 1800 which grew out of the poverty of the industrial masses. Robert Owen, Saint-Simon, Fourier, and Louis Blanc were outstanding workers in such experiments.

2. The organization of the first trade-unions after 1800... the leadership of Karl Marx, Friedrich Engels, and their associates... the international workingmen's associations, 1864... the participation of labor in politics and the formation of Socialist and Labor parties in various European countries.

3. The rise of Socialism as a theory of government and a practical organization.

These, then, briefly stated, are the chief concepts which our youth should grasp. They should understand the role of the idea

of freedom in the world's march toward democracy; the relation between the growth of political democracy and the development of industrialism; the rise of the middle class; the importance of the doctrine of laissez faire; and the gradual organization of the lower classes, with the ensuing conflict over government and ownership. With this European background they will be able to understand better the developments which took place in America.

The Building of Empires

Now, the advance in machine technology took place in five major countries — Great Britain, the United States, France, Germany, and Japan — and to a lesser extent in several minor ones. England had a long head-start, but the United States and the others caught up with her, had even surpassed her in industrial production by the time of the First World War. As a result, each of these five major powers built a national economic system which competed fiercely with that of each of the others. Even before the outbreak of the war the principal structure of each of these systems had been erected. Each nation had created a system out of the six indispensable physical factors which we enumerated on pages 33-40, and England led the way.

A MAD ERA OF INTERNATIONAL COMPETITION

Although even before 1870 careful students had urged the leaders to plan domestic and foreign production, export and import, the latter went on their way Europeanizing the earth. With accelerating momentum and without design, without analysis of the conditions of a dramatically changing economic world, they continued their export of capital and their refusal to divide surplus capital with the people. Even after 1918, when the five major national producing plants of the world had been built, the captains of industry, controlling the five governments, proceeded by the same methods which they had followed in building the system in the progressive nineteenth century

Meanwhile the world economic situation changed dramatically. In the first place, national rivals, especially the United States, France, and Germany, arose to question Great Britain's claim to leadership. By 1914 they had caught up with her in the use of machines. After the war they — especially the United States — outdistanced her in the production of iron and steel, coal, cotton and woolen textiles, and other goods.

Finally, and most dangerous of all, competing industrial systems arose in each of the noncolonial exploited regions of the world. Japan astonished the world by her swift adoption of power-driven machine manufacturing between 1880 and 1914. In China, in leading Latin-American countries, in parts of Africa, and in the Near East, factories were set up by native as well as by foreign capital. As in Europe and America, each region added to the world's surplus capital. And much of this capital, instead of being divided with the rank and file of people, was put back into more factories, more mines, more corporations. And with it all, nationalistic patriotisms and the competitive spirit spread more fiercely than ever around the world.

From Empire-building to World War

Thus was created in England, France, Germany, the United States, Japan, and other countries a fragile, interdependent scheme of world trade and nationalistic rivalry. The momentum of industrialism increased at an alarming pace. The powers of Europe, — England, France, and Russia on the one hand, and Germany, Austria, and Italy on the other, — competing with one another for colonies, iron, coal, and oil lands, began to fear and suspect one another. And in the attempt to keep a tipsy balance of power between them, prime ministers and foreign officers entered into conspiracies and secret alliances.

By 1890 the whole world scheme of economic competition was beginning to get out of hand. By inventing the rotary press (1845), Richard Hoe had multiplied a thousandfold the rate at which ideas could be disseminated. The telegraph, the telephone, and the organized press tied people together — yet rent them

asunder. The bourgeois owners controlled the public mind by controlling the agencies of communication. Although the world was smaller, there were terrifying cleavages among the populations. For the first time in the history of the world whole peoples were taught to hate. Thus nationalism of the rank and file of the people, a new phenomenon, was born of the industrialism of the nineteenth century.

The astonishing export of capital expedited the movement for greater navies, larger battleships, and guns that would shoot farther. Navies expanded, and taxes staggered nations. Foreign offices learned that more men must be taught the art of war, and Europe expanded the practice of military conscription.

By 1900 the spirit of national pride had turned Europe into an armed camp. War was the inevitable result. The story came to its climax quickly. Hostilities nearly broke out in 1905, again in 1911. Finally the fuse was lighted in the summer of 1914, and the great explosion occurred.

This, in outline, is the story of the spectacular events from the time of James Watt to the World War. It is, in short, an account of the invention of industrial civilization and the Europeanization of the earth. Even by 1914 the tangle of forces and factors had created a tenuous world. But to understand it and the actual impasse of the 1930's we must survey the manner in which the continent of North America was conquered in the Machine Age and an era of potential plenty was ushered in by our new Power Age.

CHAPTER IV - THE EUROPEAN CONQUERS NORTH AMERICA

WE ARE NOW in a better position to understand the American counterpart of this new industrial-democratic culture. In studying it we must bear in mind that all the civilizations which emerged in different continents had several fundamental characteristics in common. For example, all were industrial, using power-driven machines to produce much of their food, shelter, and clothing. They were interdependent, though America was somewhat less so than the others. They experimented with one kind or another of political democracy. They were characterized by a general adherence to the Christian religion. All had developed complicated languages and advanced methods of measuring and recording events. And they all had set up a universal system of elementary schools, and a complex network of other educational institutions - for example, the press, the radio, the pulpit, the public forum — and with these had made 90-odd per cent of their people literate. Thus the various national civilizations of the new industrial-democratic culture had much in common.

Nevertheless each changing country produced its unique national variant. Differences in racial stocks, in language, in cultural contacts, in historical background, in climatic and other geographic features, inevitably produced diversity in culture.

This divergence from the common pattern is especially evident in the United States, and it is therefore of prime importance for the curriculum-maker to understand clearly the chief factors which have made of American culture the unique thing that it is. Let us review rapidly these special factors.

I. The Factors Which Made a Rich American Civilization Possible

1. The Americans Developed Culture IN A Virgin Continent Isolated from Europe

Even in 1600 Europe was made up of several well-developed national states, hundreds of small principalities and free cities, and other settled and highly integrated forms of community life. North America, however, was at that time an almost untouched continent. It was inhabited by less than a half-million semi-settled Indian people whose culture lacked the technological elements which the civilizations of Europe had developed. Hence, when the first Europeans came to North America to establish permanent homes, they found a continent whose resources had hardly been touched.

Not only was this continent of North America untouched, but also it was isolated, three thousand miles from Europe. Throughout the seventeenth and eighteenth centuries communication between the two continents was possible only by means of sailing vessels, whose voyage required at the very least a month to six weeks. Not until after the middle of the nineteenth century, with the laying of the first telegraph cables, the crossing of the first large ocean steamships, and the world-wide use of electrical communication, was this isolation broken down. This factor of isolation is of great importance because it permitted the descendants of the Europeans who settled on the shores of North America to build a new civilization with comparatively little interruption from the mother continent. Thus the foundations at least of the new American culture were well laid before the two continents were bound together closely by modern transportation, communication, and trade.

2. THE UNIQUE GEOGRAPHY OF THE UNITED STATES

Three geographic factors marked this vast territory as one of the potentially richest economic regions of the entire earth. The first was its location in a stimulating and productive climate. Lying between the thirtieth and fiftieth parallels north latitude, it is a region of alternating temperatures and rainfall, the seasons being strongly pronounced and the temperature of much of the country changing frequently. This type of climate provides a variety of growing seasons and is therefore adapted to the production of most of the basic foodstuffs which a numerous population needs for a high physical standard of life.

The second factor was a vast store of natural resources. A territory of three million square miles held within it gigantic economic wealth — broad farming lands, stores of coal, oil, and other sources of power, and raw materials, such as copper, iron, and limestone, indispensable to the development of an industrial country.

The third factor of importance was an unusual coast line, which sheltered many of the earth's finest harbors, Those on the eastern shore are located in a strategic position, directly opposite Europe, and have led to the development of the world's most traveled ocean-trade route, namely, that of the North Atlantic Ocean.

These economic-geographic resources helped to make America one of the richest garden spots and centers of industrial exploitation in the entire world. Although its area constituted only 5 per cent of the land surface of the earth, within it in recent years has been produced annually more than 40 per cent of the world's steel, 40 per cent of the coal, 70 per cent of the oil, 25 per cent of the mechanical horsepower, 35 per cent of the railroad mileage, 60 per cent of the telephones, 75 per cent of the automobiles, 55 per cent of the cotton, 20 per cent of the wheat, 20 per cent of the corn, etc. Such statistical facts illustrate the great extent to which the United States has carried mechanized production.

3. THE UNITED STATES

ESSENTIALLY A NATION OF PROGRESSIVE EUROPEAN IMMIGRANTS

The third factor was a very large population of ambitious, energetic people of varied European stocks. Throughout its history our country was developed by a constantly renewed stream of immigrants. Today practically every person in the

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United States is either an immigrant or a descendant of immigrants to North America, and all but a small fraction of this immigrant population has come from Europe. In the year 1920, for example, only 14,000,000 of the 122,000,000 people in the United States were from countries other than Europe, and "1,000,000 of these were descendants of African Negroes." Although the United States is peopled by immigrants of more than forty nationalities, five chief groups contributed most to the settlement and development of North America.

- 1. The British, Germans, Scandinavians from northwestern Europe.
- 2. The Italians from southern Europe.
- 3. The Slavs from eastern and southeastern Europe.
- 4. The Jews from many different European countries, especially from eastern Europe.
- 5. The Negroes, mainly from Africa.

Of these, the northern and western Europeans contributed the preponderance of the stock. Until 1790 they constituted 99.7 per cent of it, and 91 per cent of these were British. At the beginning of our national existence, therefore, the people who were to launch the great conquest of the North American continent were primarily English. But in the 1840's and 1850's the Irish and the Germans came and settled, mainly in the northeastern towns and cities, the Germans concentrating especially in the states between the Mississippi, the Ohio, and the Atlantic. Then between 1870 and 1900 came the Scandinavians, two million strong, settling primarily in the north-central states. The "Old Immigration" is thus seen to have originated primarily in northern and western Europe, and to have continued for two hundred and seventy-five years, from the early 1600's to about 1890.

Then the immigration changed. The so-called "Old Immigration" gave way to the New. The number of newcomers from Great Britain, Germany, and the Scandinavian countries dwindled. Eastern and southern European immigration speeded up tremendously in response to the great and growing demand for unskilled labor created by the Machine Age. Half of these new immigrants belonged to three of the five principal groups which

we have named: the Slavs, the Italians, and the Jews. They entered through our Eastern immigration ports in a flood of more than a million a year. Between 1899 and 1914 more than 15,000,000 people came from eastern Europe.

By this time the free land of the nation was gone. These new immigrants, especially the Italians and the Jews, tended to settle in cities, the northeastern cities particularly, congesting in slums and creating little islands of foreign culture. This congestion tended to intensify the already-difficult racial problems, especially the problems created by the Negroes and the Mexicans. In 1930 there were more than 12,000,000 Negroes in America and almost 1,500,000 Mexicans, together with 140,000 Japanese and 75,000 Chinese. Although the Orientals have from time to time created local problems of racial conflict on our western coast, it is the Negro problem of the South and the Mexican problem at the Rio Grande frontier that have been most serious.

Looking at the population as a whole, then, we see that one of the chief factors in the development of American culture has been the interplay of diverse racial and national groups. We see America as a nation of immigrants throughout its entire history. No other large country reveals as complicated an immigrant character or as diverse a conglomeration of national elements. It is the welding of these various nationalities, races, religions, philosophies, interests, and standards of life into a homogeneous culture that constitutes one of our most important and most unusual problems.

4. THE DYNAMIC PIONEERING TRAITS OF THE EUROPEANS WHO CONQUERED NORTH AMERICA

It is the traits of our people which account chiefly for the character of our unique American culture. The vast resources of the country could not have been exploited by a weak, submissive people. The colonial fathers, who endured terrific hardships in order to carve out homes for themselves on the Atlantic coastal plain and who then in bloody revolution freed themselves from their economic masters in England, were a sturdy and adventurous group, intelligent, resourceful, and able.

These first pioneers and also many of the others who entered this country in the 1800's were persons of initiative and of liberal thought who had refused to submit to tyranny in their native lands — the Huguenots of France, for example, or the independent-minded liberals of Germany, who came here two centuries later during the repressive years of the 1840's. Nonconformists they were, — in politics, in religion, in social life, — a company of men and women of the "Left." Those of the "Right" for the most part stayed at home, conformed, and submitted. And all who came were driven by the desire for a better living. The lure of "better land over yonder" drew them ever westward.

In the new land to which they came were other factors which accentuated their natural ambition and energy. These traits which the pioneers brought were further developed by America's harsh continental geography, which yielded its untold riches only to the persistent, the industrious, and the adventurous. The doctrines of "success," "freedom," and "equality" found here their natural home, as well as kindred doctrines of "To the victor belong the spoils," "I'm just as good as you are and a little better." We were a whole nation of pioneers.

5. THE NEW AMERICANS

BROUGHT WESTERN-EUROPEAN CIVILIZATION WITH THEM

The European colonists who settled in America in the seventeenth and eighteenth centuries possessed a great weapon in their attack upon the geography of North America, namely, an advanced culture in their homelands. They brought with them tools, implements, furniture, clothing, animals. Even more important, they brought with them the ideas of the European, the languages of the European, his knowledge of the universe, and his knowledge of how to measure and to record facts. And as generations passed and new groups of discontented and ambitious Europeans left their homelands for the New World, they too brought the latest elements of European culture.

It is necessarily true that during the first century of colonial settlement the chief concern of the colonists was in building a

physical home and community life; but even so, from the very beginning, the intellectual life of the people was not neglected. The American school is a typical example of the transplanting process which so effectively rooted the Old World culture in a New World setting. A few schools and one college were established for the people even in the first decade of the settlement of Massachusetts. And a growing body of intelligent students of every aspect of life led in the development of American culture.

Thus we see that the original foundations of American civilization did not have to be improvised by laborious trial and error; they were imported from foreign soil.

Summing up, then, we have these as the factors which made possible a rich American civilization:

- 1. An untouched continent, isolated from the economic and political turbulencies of Europe.
- A vast domain of soil, forests, vegetation, fuels, metals, and other natural resources located in a stimulating and productive climate.
- 3. A population basically northwestern European, contributed to by diverse nationalities, races, and cultures.
- 4. A "selected" population of pioneering, adventurous, resourceful persons of independent mind and responsible character.
- 5. The advantages of European culture.

II. The Chief Movements in the Building of the Civilization Itself

Although our central thesis is that a curriculum must be based upon the culture of a people, it is no purpose of this section to review the details of American history. The curriculum-maker naturally will become a student of those in order to guarantee that his curriculum will be based upon the historical and contemporary facts and movements of American culture. However, having summarized the factors which made our history what it is, we should attempt to see in broad perspective the chief movements which marked the conquest of the land itself.

In a very real sense the story of the westward movement is the three-hundred-year-old history of America. If one takes this long view of westward expansion, the three centuries fall naturally into some six phases of land clearance, settlement, and exploitation. First come nearly two hundred years of colonial times.

THE FIRST PHASE: THE LONG STRUGGLE
TO ESTABLISH EUROPEAN CIVILIZATION IN AMERICA, 1600–1800

The first phase covers the longest time span of all, embracing almost two thirds of our three centuries of development. It is the period marked primarily by the establishment of the thirteen colonies, by the American Revolution, and by the critical decade that followed it, during which a Constitution was made and we were launched as an independent nation of the world. Our purpose, however, is merely to outline very briefly the achievements of this long first period of civilization-building.

Suffice it to say that the first two centuries of settlement were given over essentially to getting a foothold on the narrow Atlantic coastal plain. The hardy colonists wrested from the land small diversified farms in the northern colonies and tobacco, rice, and indigo plantations in the South. As the decades passed, they turned their crude, unhygienic shelters into comfortable homes. Although to some extent they imitated the forms and materials and used the handicraft methods of their European homeland, they produced many fine examples of indigenous architecture. Slowly little towns in which were skilled craftsmen, small shop-keepers, and a small white-collar class appeared up and down the coast. The ports of Boston, New Bedford, New York, Baltimore, Philadelphia, Savannah, Charleston, and New Orleans became centers of thriving coastal and ocean trade. It was the most spectacular conquest of land recorded in history.

¹ For a full and modern treatment of this astonishing feat see Charles and Mary Beard's Rise of American Civilization (The Macmillan Company, New York, 1927), Harold Rugg's History of American Civilization and History of American Government and Culture (Ginn and Company, Boston, 1930, 1931), A. M. Simons's Social Forces in American History (International Publishers Co., New York, 1926), and J. T. Adams's Epic of America (Little, Brown & Company, Boston, 1932).

Contemporaneous with all this activity was a struggle for political and civil liberty, and face-to-face exchange of views. Leaders were developed for the coming conflict with England. The greatest evidences of this striving for liberty were events so momentous that they led finally to war. After 1765 a growing sense of the injustice of economic dependence on England led a small group to undertake the trials of armed revolution. Although a great many of the colonists remained aloof from the movement, a few heroic and persistent leaders, backed by a small fraction of the artisan-farmer population, succeeded in achieving independence in 1783.

At the close of the Revolution conditions were chaotic indeed. Recall the quarreling of the thirteen independent states, bound together merely by that league of friendship, the Articles of Confederation. Consider at what a tragically low ebb were the economic conditions of the masses of the people. It was a time marked by stagnation of trade, by hoarding and the issuance of almost valueless paper money, by riots among the people, by speculation in public land. We remember how Washington, Madison, Hamilton, and their company carved out the American Constitution in the hot months of May to September, 1787, and how they got it ratified by little more than 1½ per cent of the American people. (Three per cent voted; a bare majority ratified it.) We recall their fear of "too much democracy," their contempt for the "turbulence of the masses," and hence their establishment of a government of "checks and balances" in which changes were made painfully difficult to effect.

At the end of the first two hundred years of American civilization, the frontier was still little more than a hundred miles from the coast; beyond it stretched an unknown continental domain which even Washington did not believe could be brought in its entirety under the Stars and Stripes. But the foundation of the new America was laid — the community life, the state and national government, and the stratification of the people into economic classes.

THE SECOND PHASE:

THE WESTWARD MOVEMENT, SETTLEMENT, AND EXPLOITATION

Then in the hundred years after the making of the Constitution. American pioneers acquired twenty-five times as much territory as their ancestors had in the previous two hundred years. Our American histories tell of their heroic struggles to clear the forests, to till the untouched soil, to establish permanent homes, and to build roads to the market towns. Even before the outbreak of the American Revolution, Daniel Boone was blazing trails south of the Ohio and setting up one-room log cabins in the Kentucky wilderness. At the very moment of the battles of Lexington and Concord, the Wilderness Road was being cut through mountain forests, and caravans of homesteaders were impatiently awaiting its completion. North of the Ohio in 1778 and 1770 Kentuckians under George Rogers Clark were seizing territory from the British and their Indian allies. Hardly had this happened before the first uncertain streams of westwardmoving humanity found their way down the northwest slopes of the Appalachians, settling entire regions along river valleys, fertile creek bottoms, and flatlands from Kentucky clear to Michigan. Shallow fords in streams and junctions where rivers met marked the sites for the first crude stores and trading villages, which grew in size until soon they became towns and cities.

Gradually the stream of moving humanity swelled, rolling up to such volume that the distinguished foreign visitor Alexis de Tocqueville exclaimed that it was "like a deluge of men rising unabatedly and daily driven onward by the hand of God." It was a great land-hungry horde which hacked down the untouched forests of Ohio, Indiana, Illinois, Michigan, Kentucky, and Tennessee, and turned them into waving cornfields. By caravans of pack horses, in Conestoga wagons, and on flatboats they came, through the gaps and down the Ohio, the Mississippi, and their tributaries. Thus it was that Kentucky had 74,000 people by 1790, two years before it became a state. Four years later Tennessee had achieved its necessary 60,000 and had become the sixteenth state. In 1803 Ohio joined the Union, Indiana followed

suit in 1816, and Illinois in 1818. Thus in a generation a vast domain of wild frontier became the scene of thriving homesteads and farms, hustling trading towns, and even manufacturing cities.

THE THIRD PHASE:

THE RISE OF THE COTTON KINGDOM IN THE SOUTH

The westward movement from the south Atlantic coast was almost concurrent with that from the northern section. For years the tobacco, rice, and indigo planters of Virginia and the Carolinas had known well that their lands were all but worn out. Their fathers had farmed so wastefully that even large estates could no longer support a Southern family and its slaves. Shortly after 1800, therefore, many plantation-owners joined the westward land-seeking movement. Southward around the tail of the Appalachians the movement took its course, out to the rich bottom land along the Gulf of Mexico east of the Mississippi.

A new crop served as the chief magnet. No longer was tobacco king in the Southland. Eli Whitney had succeeded in inventing the cotton gin in 1793, and fortunes were to be made on the gently rolling plains of Alabama, Mississippi, and Louisiana. The geography of the region, — the rich soil, the plentiful rainfall, and the long, hot growing season, — together with an abundance of Negro slave labor, made the growing of cotton there inevitable. So it was that between 1800 and 1850 the cotton kingdom emerged coincident with an orgy of westward land exploitation. While Virginia's cotton production, for example, fell between 1826 and 1834 from 25,000,000 pounds to 10,000,000, Mississippi's rose from 20,000,000 to 85,000,000.

So swiftly did the westward flood of settlement advance that Louisiana joined the Union in 1812, Mississippi in 1817, Alabama in 1819, and, across the Mississippi River, Missouri in 1821. Indeed, by 1821 the state system had absorbed all the land between the Atlantic and the Mississippi River, except the northern half of the Northwest Territory. Thus the vast westward movement began with land-hungry men advancing the frontier westward at the rate of thirty miles a year. Behind that moving frontier

hamlets took the place of lone homesteaders. The hamlets became towns, the towns became cities, and the nation grew.

THE FOURTH PHASE: THE AMERICAN EMPIRE TAKES TEXAS

No sooner did the Southern planters get to the Mississippi than they saw a vision of even greater empire reaching toward the setting sun. Texas, as large as several of their states combined, lay before them, owned by Mexico and comparatively uninhabited. While other trail-blazers were moving into the Northwest, traders were plunging into this undeveloped southwest region also. Hugh Glenn and others, with their pack trains of mules and horses, beat wider and wider the Indian trails along the Arkansas River out to the old Spanish city of Santa Fe. Over this Santa Fe Trail year after year moved even larger caravans of prairie schooners, which, as the trade route became more popular, left the alien territory along the way dotted with more and more tiny settlements of homesteads.

Again geography was playing its part in human settlement. The northwest frontier was moving across the Mississippi and over the fertile plains of Kansas and Iowa, stopping only at the foot of the Rockies. Simultaneously in the South bands of settlers were establishing permanent hamlets in Texas. By 1830 Stephen Austin, Sam Houston, Henry Smith, and other leaders governed more than twenty thousand "Americans" there. But their government was extralegal, for the land was owned by the Mexican republic. As settlers rushed in, conflicts became more and more frequent. The United States government tried to avoid the issue, but the slave power of the South succeeded eventually in forcing the flag to follow the trade of the westward-moving pioneers. In 1845 Texas was annexed, and in 1846 a war, in which the weak and poorly equipped Mexicans were swiftly defeated, added the great southwest territory of Utah, New Mexico, Arizona, and California to the American empire.

Thus by the time the land east of the Mississippi had been developed into organized states, this great southwest region had been captured and staked out for future American statehood.

THE FIFTH PHASE: THE LAST LAP ACROSS THE WESTERN MOUNTAINS

At the beginning of the nineteenth century Lewis and Clark blazed a two-thousand-mile trail up the Missouri River to its very highest point in the Rocky Mountains, across the summits, and down the rivers which flow westward into the Pacific. For two years they toiled, explored, and mapped their route. Thus immediately after Napoleon's sale of the Louisiana territory to the American government, the Oregon Trail was blazed.

In the quarter-century that followed, Canadian and American trappers and traders explored this country, and for twenty-two years the English under John McLoughlin ruled "Oregon." Then in the thirties and forties, history repeating itself, the trappers and the traders were succeeded by homesteaders. In 1842 the first large band endured the torture of the plains and the mountains to reach the rich soil of the Willamette and Columbia valleys. The continent was spanned at last. Week after week, after the success of this first caravan of prairie schooners, wagon trains doggedly lumbered their way over blinding sandy deserts, across the plateaus, and up and down the precipitous slopes of the mountains, fighting Indians and defying hunger.

South of Oregon lay California, the white missions of the Spanish monks and priests scattered here and there under the blue southern sky. Then in 1848 gold was discovered at Sutter's Fort, and in the next year 80,000 people rushed into California in search of the precious metal. Within a year California claimed statehood. The California and Oregon trails were crowded with ever larger trains of wagons; gold-hunters and settlers came also in ships around the tip of South America, up the coast, and into the Golden Gate at San Francisco. This "boom" town was soon to become the greatest port of the Pacific coast.

So it was that in less than three quarters of a century the entire continent had been spanned. Whereas in 1775 only a few thousand lone pioneers were settled west of the Appalachians, in 1850 a hundred thousand had made their homes on the Pacific coast, nearly three thousand miles from their relatives and neighbors

on the Atlantic seaboard. The white man had conquered the red man's continent. The greatest migration of modern history had run its course.

THE SIXTH PHASE: THE LAST FRONTIER
CATTLE PLAIN, MINING TOWNS, AND HOMESTEADS, 1860–1800

In the hurry to get to the promised lands of California and Oregon, many wealth-seekers had scornfully passed over the prairies east of the Rockies. Others, led by ambitious cattle-sellers in Chicago, Kansas City, and other new Middle West towns, saw the possibilities of wealth there. Some of these people staked out farms and homesteads, by great labor and intensive cultivation wresting a living from the land. Others, more adventurous, sensing the fortune to be made by shipping meat to the growing cities to the eastward, developed a great cattle industry on the plains from the Dakotas to Oklahoma and Texas. In this region itself cattle could not be sold because they were so plentiful; great herds freely roamed the plains. But St. Louis, Kansas City, the growing towns of Omaha, Chicago, Louisville, Pittsburgh, and all points east needed meat.

So it was that adventurous spirits made a new trail, this time a cattle trail winding north and south, like a great rope, two thousand miles up the eastern edge of the Rocky Mountains from the southern cattle country to the packing cities of the North. From Texas to the Canadian boundary it ran with loose strands and main trunk lines throughout many intervening states. Even today the plows of Kansas and Nebraska farmers have not entirely obliterated the old cow trails. Thus it was that in the 1870's and 1880's cowboys and their herds ranged the plains, their ranch houses gradually becoming the nuclei for hamlets, villages, and towns.

The geography of this Western land offered attractions other than rich soil and vegetation for cattle. By the 1870's men were passing word from mouth to mouth that the Western mountains were full of gold and silver. From all directions, west, east, and south, men of all professions rushed in to stake out claims for hidden riches. Mining towns became raucous cities overnight.

Virginia City, for example, housed 10,000 people within a year of its settlement. Seven hundred million dollars' worth of gold and silver was taken from the surrounding mountains in the 1860's — a significant fact, for it was this precious metal which helped to finance the Northern armies in the Civil War.

Montana furnishes another example. In 1864 searchers stumbled upon an amazing gold deposit in Montana, known as the Last Chance Gulch, now the main street of Helena. By 1876 Montana had yielded nearly \$150,000,000 in gold. In the 1870's and 1880's lead and silver mines also were giving up their riches in Nevada, Colorado, Arizona, Idaho, Utah, and Wyoming, and copper, zinc, and other metals had been discovered.

So it was that the lure of precious metals, as well as that of farming and ranching, drew people into this hitherto unsettled section, that of the last American frontier. The vast movement, which had advanced the frontier westward at the rate of thirty miles a year, was over.

A BACKWARD GLANCE

Our story is literally a motion picture of the westward movement, one hundred years long. In 1790 most of North America was still the red man's country. In 1890 most of it belonged to the white man; for steadily, as the white man had advanced westward, so the red man had retreated before him.

The increase in population during this time was as spectacular as the conquest of the land. In 1790 the population was 3,900,000; in 1890 it was 62,900,000. In that period more than 20,000,000 newcomers had crossed the Atlantic from Europe and had joined the westward march of settlement.

Population figures dramatize also the rapid growth of the West. In 1860 Montana was an almost unpeopled wilderness; in 1880 it had 40,000 people; in 1920, almost 550,000. In 1860 Nebraska had 29,000; in 1920 it had 300,000.

"Go west, young man, go west," Horace Greeley had said. Opportunity, freedom, and success lay there. So the frontier steadily beckoned until it finally disappeared.

Meanwhile the First Industrial Revolution Completed the Mechanical Conquest of America

Perhaps the most astonishing thing about the hundred years of land settlement is that most of it was accomplished without engines and machines. The westward movement was a drama of ox-drawn wagons, of flatboats, of pack-horse trains, of forests cleared by axes, and of food, shelter, and clothing all prepared by hand. The land epic was almost entirely a product of the natural human resources of the people.

But behind the moving frontier of the westward settlement, in these years of land conquest, mechanical conquest was taking place to the eastward. By 1790 the English phase of the Industrial Revolution was already under way. In 1790 Samuel Slater, an English weaver, brought the plans of the new English machines to America (constructed from memory because England was jeal-ously prohibiting the export of machines and designs), and soon afterward Slater's cotton mill at Pawtucket, Rhode Island, launched the Industrial Revolution in America. Then in rapid succession came a stream of inventions: Eli Whitney's cotton gin (1793); Francis Lowell's power loom, also constructed from memory (1814); Elias Howe's sewing machine (1845); Charles Goodyear's process of vulcanizing rubber (1844); William Kelly's method of making steel (1846) — refining out the impurities of iron by blowing air through the molten metal; and many others.

A mechanical revolution took place in agriculture a little later, transforming the raising of food by means of plows, cultivating machines, seeding and harvesting machines, and the like. Cyrus McCormick invented the reaper in 1831. However, so indifferent were the farmers that he sold no machines at all until 1840, and it was not until the 1850's that the practicable use of the machine was made clear to the farmers of the Middle West. Indeed, not until the Civil War demanded mass production of food for armies did agricultural machines come into their own on the corn and wheat lands of the American central plains.

Meanwhile a feverish century of improvements in transportation and communication was under way. Up and down the eastern seaboard people were working in an unending bustle of activity. Marshy wagon paths were being transformed swiftly into macadam highways. Three of the largest Eastern cities were racing one another to dig a way through the Appalachians to the growing trade of the Great Lakes region. The Erie Canal was finished in 1825. By 1825 also steamboats plied their way from Pittsburgh to New Orleans and up and down the American coasts. Oliver Evans, John Fitch, James Rumsey, Robert Fulton, and others had harnessed steam power to boats.

On land as well as on sea the new experimental transportation was developing. Horse-drawn wagons and wagons with sails were rolling on plank rails. These crude precursors of the railroad were supplanted in the 1820's by Stephenson's English locomotives and by Peter Cooper's *Tom Thumb*. By 1850 railroad lines had crept through the Appalachian gaps, and the Atlantic was joined with the Great Lakes and the Mississippi in an unbroken system of steel, water, and highway transportation. In this way the civilization of wood and leather gave way to one of iron and coal.

The Civil War: a New Industrial Revolution

All the progress in industrialization was slow, however, until after 1860. Then came the Civil War, and in the short space of four years the impetus was provided for a vast revolution in industry and business.

For nearly fifty years the Ohio River had divided two economic civilizations — the North, with its machines, manufacturing, coal andiron mining, thriving trade, and industrial cities; and the South, with its economic interests concentrated on the raising and selling of cotton. A few ironworks had been opened there, occasional cotton mills produced yarn and cord, and about ten thousand miles of railroad track had been laid down; but the great mass of the people still lived by raising cotton, tobacco, corn, and sugar cane.

For fifty years these two civilizations had revealed two different philosophies of life which were always at swords' points with each other. Vital problems of union and disunion, sectional prejudices, slavery and antislavery passions, created a political impasse between them. Finally war broke out. Sumter fell in April, 1861, and Lincoln and Davis called for volunteers on both sides of the Ohio.

It was then that a new economic and social revolution was ushered in. The generals demanded uniforms, guns, ammunition, locomotives, tremendous supplies of food. Hence, although the war ruined the one-crop, agricultural South, it provided a great stimulus for the new Industrial Revolution in the North. In two ways it served the latter: first, by an enormous demand for manufactured goods, and second, by teaching the Northern industrialists the value of huge accumulations of capital.

The Great Industrial Expansion, 1865–1914

The demand for manufactured goods resulted in the rise of mass production in all basic industries. It created the ready-made clothing industry. In four years it more than tripled the amount of cotton and wool consumed annually. It brought about a revolution in shoemaking, utilizing Howe's ideas and the McKay shoe-sewing machine, so that millions of pairs were turned out annually. It made the reaper and other farming machines a practical success, and released a million men from the farming fields to serve on the battlefields. It created the new canned-goods industry. It brought a boom in railroad-building — not only in the war zone but throughout the continent, so that great transcontinental systems joined the Pacific Ocean to lines already laid down between the Mississippi and the Atlantic.

The war taught the captains of industry another lesson too — namely, that mass production can be carried on only with enormous amounts of capital in the hands of a few executives. Potential masters of capital saw the Northern government raising

undreamed-of sums of money and pouring them into larger and larger types of factory production. Hence even during the Civil War itself the foundation was laid for the development of the great corporations to which we have already referred. Each of the great corporate industries got its start at that time and in that way. John D. Rockefeller entered the scene of the oil drama even as early as 1862. Carnegie joined the Kloman Brothers' iron business in 1864. Junius S. Morgan became a partner in the great business house which later was to become the banking octopus of Morgan and Company. In the remaining thirty-five years of the century these infant industries expanded, capital grew, and in a ruthless warfare of competition small competitors were either bought out or driven out. Related industries were woven into growing corporations, selling methods were improved, economies in production were achieved, and at the turn of the twentieth century a large percentage of the national production in each field had been brought together under a single management.

Therefore, whereas the United States in 1865 was still a country of farms, small towns, and a few large cities containing small factories and businesses, fifty years later it had become a leading industrial nation. Cities had grown by leaps and bounds, inventions had multiplied many fold, great central power stations were sending electric power over long distances to light cities and to run factory machines, and a few powerful corporations had taken the place of many individual owners and partnerships.

The Struggle over Property and Government in the Industrial Expansion of America

With this background of the industrial expansion of America and with that of European experiments in "democratic government," which were discussed in Chapter III, we can trace the conflict over government in America, especially throughout the nineteenth and early twentieth centuries. Basically the conflict was of the same general nature as that in Europe. This fact is illustrated by the nearly two centuries of struggle for representa-

tion in and control of government between the merchants and landlords of the Atlantic seaboard and the small farmers of the "back country" and the small freeholders and craftsmen of the towns. However, as we have seen, the individualistic spirit that developed in the rank and file of Americans differed in important ways from that which arose in Europe. The unique character of American individualism must not be forgotten.

As space is limited, we can merely call attention to some of the more important factors of our political history. The conflict over government after 1860 should be noted, with emphasis on the part played by the leaders of the new industry, business, and finance in the two major political parties, in Congress, and in the courts. Recall, for example, the protection of business by tariff legislation; the favoring of the well to do by laws, executive action, and the decisions of courts; the rise of invisible government; the recurrence of startling scandals in economic and political life; and the maintenance of the principle that government should keep hands off industry, business, and finance. Note also later attempts to regulate and thereby control big business by trust regulation and by changes in government which aimed at giving the people more direct control over government.

The revolt of the farmers and the city workers after 1880 is another important factor. Bring to mind such farmer political movements as the Grange; the entrance of the labor unions into politics; the "Populist" movements; and the slow formation of Socialist parties.

A last factor, but one of great importance, is the extent of vital knowledge of and interest in problems of government by the masses of the people, and especially by those in the growing cities. We should ask ourselves this question: Was there real political-economic education?

This, then, is the history of the development of America. It has shown us the chief factors which made American culture the unique thing that it is. And the curriculum-maker must have this background if he is to produce a new education for Americans today.

CHAPTER V · THE PSYCHOLOGY OF THE AMERICAN MIND

Out of the amazing period of physical construction which has just been described there emerged not only a vast economic and political system, but new individual, community, and national ways of looking at things as well. The conquest of the continent created more than a new way of producing goods; in addition it created new kinds of personality with new outlooks upon life, new bodies of opinion, and new loyalties. It is now our task, therefore, to examine this psychology of American culture so that we may utilize it in building a fitting program of education. Even now, although we are not aware of the fact, it is incorporated in the very warp and woof of our national education.

Is There One Characteristic American Climate of Opinion?

Political leaders have recently spoken and written much about the "American" way out of the depression and, indeed, about American ways of handling any and all social problems. American writers are fond of speaking of the American Mind, the American Tradition, the American Dream. Some people infer from this that the 127,000,000 Americans are dominated by the same desires, points of view, opinions, and beliefs. Others deny this, saying that there is no one outstanding American way of life. Hence it is of great importance that we consider the matter carefully and that we formulate a point of view concerning it, for the curriculum of our schools depends in a large part upon it.

We shall, of course, recognize at the outset the infinite variety

of group life. The uniqueness of family, neighborhood, and community ways of living is evident to everyone. Even twins brought up in the same family environment are seen to differ widely; how much more apparent, therefore, are the divergences in points of view, opinions, and beliefs in neighborhood groups and social organizations. Each has its own way of behavior. Each has its cliques, its Left and Right wings, its vast range of minor variations in outlook and program of action.

If this is true of neighborhoods and organizations, it is even more true of communities and nations. America, for example, is a conglomerate of more than twenty thousand communities. These vary in regional geography — that is, in location, climate, soil, and natural resources. Contrast quickly the communities of the great corn and wheat belts of the central plains, of the Northeastern industrial zone, of the Western prairies, of the New South, of the intermountain plateau, and of other such regions. These vary in size from the tiniest of hamlets to the greatest of cosmopolitan cities. They vary in human stock and in length and kind of history. They vary in physical resources, in occupations, in wealth and income, in amount and kind of education, in artistic development.

Moreover, since America represents a great heterogeneity of geography and physical community life, it is inevitable that it should also be constituted of many climates of opinion. The "American" of the hills of Georgia is a very different person from the "American" of the hills of New Hampshire. The Arizona farmer is quite different from the agriculturist of Iowa, Kansas, Illinois, or Indiana.

All this infinite variety is granted. Nevertheless it is true that there are traits, attitudes, and points of view that are so peculiarly characteristic of the people of America as a whole that one can with justice speak of the American climate of opinion. This becomes evident when one compares the characteristics of the Britisher, the Frenchman, the German, the Russian, the East Indian, or the Chinese with those of the American. Whether the American comes from Louisiana, Maine, or Oregon he is more like himself than like any of these others. Three hundred years of

strenuous combat with a harsh continent has made our immigrants and their children into new national personalities. They are new in physical and mental reaction, new in nervous tension, new in expansiveness of outlook upon life, new in resourcefulness and belief in destiny, new in attitude toward economic, social, and political matters. In short, the transplanting of the Anglo-Saxon to undeveloped North America made a new kind of person.

It is this new human being whom we call the "American," and it is his novel national culture that we call "American culture." A picture has been drawn in the previous chapter of its external civilization; we will now describe briefly its inner psychology. We shall then have sketched, in outline at least, the major characteristics of American civilization and culture, and we shall thereby have provided the foundation for our study of the curriculum of the American schools.

I. The Role of the Frontier in Producing the New American Traits

Nothing is more important to grasp clearly in the study of the American mind than the part played by the advancing frontier throughout American history. To a certain extent it would be appropriate to include the entire period from 1620 to 1890, except that the hundred and fifty years of colonial development were very different from the swift century of movement and expansion following the American Revolution. From 1790 for a whole century there was always a frontier—always some free land to be had. There were enormous open spaces where population was scarce, where state and community governments were entirely lacking, where there were no cities, towns, or even villages.

Moreover, this physical situation was unique to America. Not for a thousand years had there been a frontier in Europe. The European small farmer lived always closely surrounded by civilization, and controlled always by national, provincial, and county governments. Law made itself felt there, business was a

going concern all around the farmer, means of transportation and communication were moderately well developed. Indeed, all the cultural outlines were sketched in.

1. RESOURCEFULNESS

DEVELOPED WITH THE ADVANCING FRONTIER

Not so in America. Here there was always a frontier where every man was thrown upon his own resources. Life was lived in mountain clearings, on broad open plains and prairies. Practically everything a man had, he made for himself. There were no police or law courts to maintain order and prevent crime. There was no militia to call in for protection. There was no corner store to provide food. There were no trains to bring supplies in the event of drought or flood. Indeed, even neighbors were scarce, and hamlets and villages few and far between.

Thus each man was thrown upon his own resources, and a sense of independence and freedom was the inevitable outcome. Man on the frontier felt free as no other man of modern times has felt. Free! Unlimited opportunities to build a home, a fortune, a place in society! Under such conditions men felt no hampering bonds except the limits of their own capacities.

2. A New Sense of Equality

The subduing of the wilderness brought men of all levels of economic and cultural status close together. They faced a common need — namely, to use their muscles, their implements, and their minds in order to wrest a living from the soil on which they stood. Under such conditions money, negotiable securities, jewels, precious metals, and fine clothes were of small importance. Human ingenuity, strength, courage, and perseverance determined whether a man lived or died. Hence the stratification of society which was characteristic of towns and cities was of almost no significance. On the frontier even hitherto wealthy persons were compelled to free their slaves and their indentured servants. America naturally and literally became "dedicated to the proposition that all men are created equal."

3. THE DIGNITY OF LABOR AND THE EQUALITY OF LABORERS

Such conditions raised labor to a level of great prestige. Indeed, labor was scarce, and the worker was respected and could demand good wages. He, like the freeholder, possessed a feeling of independence. Was he not able to eat at the table with his employer, marry the latter's daughter, and discuss any problem of social or political life on a level with him? As long as free land was available, this assumption of equality prevailed.

4. THE LADDER OF OPPORTUNITY WAS OPEN TO ALL

Furthermore, there was an absence of legal class distinctions, as well as of traditional class distinctions. The frontier as much as any one single element guaranteed that American life should develop free of a rigid caste system. Youths grew up with a conviction that, if they worked hard enough and persevered long enough, they could rise to higher levels of success and of economic and social prestige than had their elders. Thus the idea of the "ladder of opportunity," the rungs of which could be climbed by any and every American, was an actuality in every growing frontier and every developing community of the country.

5. A VAST INDIVIDUALISTIC OPTIMISM AND A BELIEF IN DESTINY

Under such conditions it was inevitable that the pioneering American should become an aggressive individualist. As the decades passed and men saw success crowning their efforts to conquer the land, they came to exude a vast optimism. The individual homesteader felt it, the miner felt it, the small businessman in the towns growing behind the frontier was convinced of it; each one grew in confidence in his own abilities, as one little success followed another. It was inevitable that each one should feel not only that he could solve his personal problems of earning a living and making a home, but in addition that he could handle the collective problems of the community and the nation. "Anybody

could be President!" As one writer said of the early American: "Nothing is too high to be aspired to, nothing too low to be done. He will run for governor or for town clerk, just as opportunities occur." Thus the individual became not only the most adaptable of modern men; he became, furthermore, an incorrigible optimist. He felt that in himself he had all the resources needed to solve either his or the world's problems. The frontier made of him a quick-witted Jack-of-all-trades. On a frontier of free land and in a continent of unlimited natural resources the American came to feel that he was the man of destiny and that, once the nation was built, it would lead all other nations on all other continents, and that these other nations would model their civilizations on it.

6. HARD WORK, THRIFT, DISCIPLINE!

The concept of discipline in American life was of European origin. The Puritans who settled the northeastern coast brought it with them. Generation after generation of colonists and then of pioneering backwoodsmen on the frontiers were subjected to the same norm of conduct. Like their English forefathers, they "knew God, and labored in the affairs of practical life." The never ceasing struggle to make ends meet made hard physical labor the very foundation of American life. Industriousness and thrift came to be valued highly; idleness was regarded as an evil. The idea of discipline and rigorous self-control, of meeting one's obligations, and of living up to what was expected of one became controlling standards in life. Men and women and children alike rose with the dawn, worked hard all day, and slaved in the pursuit of things. This conception differed from that of Europe's only in that the opportunities for hard work, thrift, and discipline were necessarily greater in America than anywhere else in the world.

7. THE AMERICAN GOSPEL OF SUCCESS

Thus it was that in the villages and towns growing in the wake of the westward-moving frontier, the materialistic concept of success came to be a guiding standard of life. As the industriousness which was the means to it became a moral virtue, so its achievement did likewise. Money-making was regarded as a patriotic duty throughout the whole initial building era of the nineteenth century. The movement of affairs was so swift that there was little opportunity for meditation about values. "Get it done!" was the slogan, and a callous attitude developed with respect to the morality of the means by which the doing was accomplished.

Thus a typically American gospel of success was created. It has energized practically everyone from the time of Winthrop's landing at Massachusetts Bay to that of the latest land boom or stock-exchange speculation. Within each community, as it has developed, each youth has aspired to be one of the "big" men of the town — an owner of large property and an employer of men, a political or social leader; in short, a man to be known and followed by his fellow residents. And the shortest and easiest route to this success was money-making.

II. The Climate of Opinion Which Arose in Village and Town behind the Moving Frontier

Our study of the traits of the American has been focused primarily upon the consequences of frontier life. We must remember, however, that the frontier was constantly moving westward. In 1780 it was located on the western slopes of the Appalachians; in 1800, in Indiana, Illinois, Alabama, and Mississippi; in 1820, in Texas, Kansas, Iowa; in 1850, in the Far West; in the 1870's and 1880's, back on the prairies and the intermountain plateau. On the average, it moved thirty miles a year.

As the frontier moved, the more restless, adventurous pioneering stock moved with it — in fact, created it — as it advanced across the land. But most of the homesteaders stayed behind, developed their farms, built stores and shops and other small businesses, went into handicrafts and trades. Thus hamlets sprang up, and with the influx of newcomers from the "East" these grew to be villages, then to be towns, and even now and then to be small cities. Thus history constantly repeated itself

from north to south, and thus the "frontier" was constantly eaten away, its place being taken by developed community life.

I. MODIFICATIONS IN THE CLIMATE OF OPINION

What about the climate of opinion which formed behind the frontier? As population increased, as government developed, and as property and persons were protected by the police and the law, fears of physical insecurity passed away. Similarly the taking up of new land to the west changed mental horizons behind the frontier. Gradually the sense of living in the wide spaces passed. Less and less did the adventurous sense of empire-building and of unlimited opportunities to get rich quick seize the imaginations of those who stayed behind. Inevitably, therefore, certain phases of the attitude of individualism declined in importance. For example, the overweening optimism of earlier days gradually changed into a more mature appraisal of the ability of the American people to work out their own salvation. And, as community life developed, occupations became more specialized, new trades developed, professions arose, the man-on-the-street became a less and less self-sufficient Tack-of-all-trades.

2. But the Principal American Traits REMAINED UNCHANGED

But the underlying traits which were becoming characteristically "American" continued to be passed on from father to son. Until the period of the World War children continued to feel that the ladder of opportunity stretched upward before them offering the rewards of success, ever greater success, if they would climb to higher and higher rungs of the ladder. In the growing towns fathers continued to bring up their children to believe that each was as good as any other child, that democracy meant equality of opportunity, that the laborer was worthy of his hire, and that each could get a higher standard of living if he were sufficiently industrious and thrifty.

Most important of all was the fact that throughout the nineteenth century and well into the twentieth small communities continued to maintain with a good deal of clarity the original American tradition of individualism. The concept of democracy with its foundation in the Bill of Rights was accepted generation after generation and was made the basis of home and school education. The growing communities, as on the frontier, continued to espouse the right of each individual to rise to the fullest life of which he was capable, but they also taught him definitely that he was obligated to co-operate to the fullest in the carrying on of the social life of the community.

3. Thus a Unique American Individualism Evolved

So it was that out of the first hundred and fifty years of colonial development and especially in the following century of the westward movement, the American people developed a new tradition, a philosophy of conduct for men and women which was utterly unlike anything that had been produced by other nations. It was a peculiar American brand of "individualism." This unique American tradition implied all that has been said as to the equality of individuals and the freedom of men to rise by their own efforts, but it also insisted upon the acceptance of obligation and responsibility. In espousing freedom for the individual, it guaranteed freedom for all. Hence in frontier and village life the finest interpretation of individualism not only implied the individual's right to develop but also insisted upon his obligation to guard others from injury in the course of his advancement. Active responsible citizenship was the instrument by which co-operation with fellow citizens and contributions to the maximum life of the total community were to be accomplished.

This second interpretation of individualism, sponsored by generation after generation of solitary and farseeing leaders, has, however, been consistently denied by a succession of exploiters. Theirs has been the concept which a recent President of the United States defended under the title "rugged individualism." Under this standard, children were brought up to believe that each must be the architect of his own career and fortune. The ladder of opportunity stood before them, but they would have to

climb it by their own exertions, and they must not forget that many of their fellows would be trying to climb up that same ladder at the same time. If there was not room for them both on the same rung at the same moment, the stronger would push off the weaker. Rugged individualism accepted "competition as the one law, selfishness the sole morality, and wealth the supreme goal." It was the individualism of ruthlessness, of laissez faire, of every man for himself and the devil take the hindmost. It was the standard of the empire-builders, of the buccaneers of the coal kingdom, the Iron Age, the cotton kingdom. It was the individualism of unrestricted rights — and no duties!

The words of a later President of the United States, however, Franklin D. Roosevelt, reveal the twofold nature of the original American tradition:

I believe the individual should have full liberty of action to make the most of himself; but I do not believe that in the name of the sacred word, individualism, a few powerful interests should be permitted to make industrial cannon fodder of the lives of half of the population of the United States. . . . I believe that our industrial and economic system is made for individual men and women — and not individual men and women for the benefit of the system.

Here, then, is the characteristic American interpretation of democracy. Each man is free to make the most of himself, but every man's freedom leaves off where every other man's freedom begins.

4. Success and Conquest

"Bigger and better" was the cry. The building of farms and homesteads, the clearing of forests, the tunneling of mountains, the spanning of continents and oceans, left their indelible impress upon the interests and traits of the people. Throughout the nineteenth century men felt that their job was to build. Everything must be sacrificed to the development of the nation. "Watch us grow!" was the slogan everywhere, from the tiniest new frontier hamlet to the large noisy manufacturing and trading cities of the industrial zone. Everything expanded, growing bigger and bigger—farms, houses, communities, wealth and income, crops, fuel,

and metal production, factories, warehouses, railroad systems, population, everything!

In this way a tumultuous, uproarious society was built, and the man of action was produced. An abundance of natural resources lured men to exploitation. The prospects of riches spurred on construction. Build! Develop! Make progress! Build America and we'll all profit! These were the concepts of success and expansion that guided the new day.

Thus from the earliest days of American history the American mind thought in terms of bigness and aggrandizement. The goal was a larger house, or a bigger money surplus which could be invested in factories, in additional acres of land, in houses for rent. Although the growth of the community meant to the original settlers safety and the alleviation of loneliness, increasingly it came to mean more trade, higher land values, more purchasers, more cheap labor, larger bank clearings — in short, a higher standard of life, especially for the owners and leaders.

Hence a century and a half of intense concentration upon the building of the new civilization produced its mental and emotional counterpart in the American climate of opinion. The most obvious element in this was the climate of swift, dramatic, nervous action. "For God's sake, let's do something!" was exclaimed thousands of times as the parliamentary method was ousted by the demand for action. The orgy of conquest had made men of action out of the Americans. They became manipulators of things, doers of deeds, accumulators of wealth, exploiters of resources. Things — the accumulation of things — dominated them. Their whole mode of life was marked by nervous activity, by hurry. Life was short, and everything had to be done at once. The log house had to be thrown up before winter came; crops had to be sowed, cultivated, and harvested as uncontrollable growing seasons determined. Nothing could be put off until tomorrow. So it was that men adopted the attitude of subduing nature rather than of learning to live with it. And many of them came to believe that their task likewise was to subdue other people rather than to live with them.

5. NERVOUS TENSION

Hence throughout the century a climate of bustle and hurry was developed. Men seemed to feel that the North American continent, untouched as it was, provided them the most wonderful opportunity to get rich quick that men had ever enjoyed. They sensed the fact that the United States would not always be a new country; a little later it would be crowded. The youth felt this also, that they must hurry and make a place for themselves soon or it would be too late.

Nearly a hundred years ago a traveler observing life in the streets of New York said, "All is hurry and bustle; the very carts instead of being drawn by horses at a walking pace, are often met at a gallop, and always in a brisk trot." Life was indeed short, and one could not wait for the morrow. Another student of the nervous tension of the American of earlier days describes him thus: "When his feet are not in motion, his fingers must be in action, he must be whittling a piece of wood, cutting the back of his chair, or notching the edge of the table, or his jaws must be at work grinding tobacco...he always has something to be done, he is always in a terrible hurry." An American of that day summed it all up, "We are born in haste; we finish our education on the run; we marry on the wing; we make a fortune at a stroke, and lose it in the same manner."

III. But, as Manufacturing Cities Grew, the American Tradition Changed

Then came the growth of great urban centers and a marked shift in the atmosphere of community life. Thus, as population became more dense, labor more specialized, and competition among businessmen more intense, the climate of opinion of the manufacturing towns and cities became very different from that of the frontier. The concept of duty to one's fellow men fell by the wayside; the concept of the right to compete for success, even though success meant exploitation of others, grew. Decade after decade individualism became more and more "rugged."

Especially was this true in the great industrial expansion that took place after 1865. To Rockefeller, Carnegie, Morgan, and other captains and corporals of industry, laissez faire became gospel. These men, ambitious, shrewd, and callous, won the economic race at the expense of less intense and perhaps fairerminded and more sensitive men. They evolved numerous methods of making money with ease, pleasure, and profit. The old-fashioned way was to produce something of value and to sell it at a profit. But as a result of the buccaneering methods by which the great corporations were built after 1870, men learned newer and easier ways. They learned, for example, the trick of creating a monopoly of some product, preferably some necessity of life. Then they would produce it at a low cost by such means as long hours of labor, low wages, and unsanitary conditions, and would sell it at a high price.

Perhaps the chief way of making easy money was through some kind of speculation — buying land and selling it at a higher price, buying food on the board of trade and holding it until the demand was so great that it could be sold for a high price, buying securities low and selling them high, cornering gold or other precious materials, buying up patents and preventing their use except at a great profit, obtaining exorbitant interest rates by means of installment selling, manufacturing adulterated products and selling them by supersalesmanship, or even grafting in various ways in business and politics.

The get-rich-quick slogan of the New World was intensified in the cities. Developed in the earliest frontier days of free land, the goal of getting something for nothing gripped the imaginations of businessmen in the cities. From time to time the whole urban population, and part of the rural population as well, invested their savings to the end of making their money work for them. They invested in stocks and bonds. They created land booms around towns and cities.

Realtors rose up everywhere and built "additions," buying cheap land by the acre, building cement roads and streets through it, and auctioning it off at high prices by the square foot. They invested in mines—gold mines, silver mines, lead

mines, zinc mines, copper mines. They monopolized and exploited new inventions leading to new kinds of industries. "Getting in on the ground floor" became a habit; they continually tried to get something new to sell.

Making money by selling something became the obsession of an increasing number of people, especially in the cities. Inevitably, in the face of these changing standards, a new concept of "property" arose. Throughout most of our earlier history and on every frontier, property had meant primarily land, houses, implements and tools, furniture, clothes. Rarely did it mean money in the form of cash, or negotiable securities, mortgages, stocks and bonds, and the like. But, as the First Industrial Revolution developed, and a wealthy manufacturing class arose, property came to mean these latter things almost exclusively — money, securities, mortgages.

This change in attitude toward property points the way to the manner in which the original American tradition of individual obligations declined in the cities. The record of the leading businessmen and politicians after 1870 is a black one indeed. They did worse than outrage the sense of public decency. They lowered the standard of economic life. They debauched the original climate of opinion by getting millions of other men and women to emulate them. The whole tone of economic life in the cities degenerated.

We have only to mention such conspicuous examples as the Transcontinental Railroad scandals; the Crédit Mobilier; the dishonest manipulations of Vanderbilt, Drew, and Jim Fisk in the 1860's and 1870's; the stock-watering scandals at the turn of the twentieth century; the activities of the city bosses — of Tweed, and the Tammany Hall leaders in the city of New York, of Yerkes, Cox, and Weidener in other cities, and a succession of Ohio gangs in national politics which appeared to end with the oil scandals of the Harding administration — but who knows what the politicians are doing at this very moment behind the public scene!

IV. By 1890 the Frontier Had Completely Disappeared, and Americans Were Devoting Themselves Largely to Developing Cities

The 1890's marked the end of an epoch in American history. For one thing, free land was practically gone. The 1890 report of the Bureau of the Census showed that it was no longer possible to find a region in the United States which could properly be called "frontier." Here and there little islands of free land could still be homesteaded; indeed, there were some fairly large areas, as in Oklahoma and in Indian territory. But by and large the era of free land was closed. Increasingly men were to turn their attention to getting their livings in towns and cities, as their forebears in Europe had been doing for a long time.

In the 1890's, too, conspicuous inventions speeded up the movement. Automobiles and streetcars, electricity, the wireless telegraph, the radio, and the motion picture altered not only the production and exchange of goods but also the physical outlines of family, neighborhood, and community life.

During these years, too, as has been said, the amount and character of European immigration changed. The old immigration from the Nordic countries steadily dwindled, and in its place Italians, Slavs, and Jews entered our gates at the rate of more than a million a year. This had its drastic effect upon the American climate of opinion, for the preponderance of these new immigrants settled in the great Northeastern industrial zone from the Atlantic seaboard and New England westward to St. Louis and Chicago. Here they worked for money wages in mills, mines, and railroads, and in the hectic building up of the great cities.

A New Urban Climate of Opinion

This concentration of aliens in the larger cities of a comparatively small section of America helped to build a new mental and emotional climate that was thoroughly unlike the original American point of view. Increasingly the number and proportion of city men and women with a sense of community responsibility declined. Graft grew to astonishing and disgusting proportions in the municipal affairs of all great cities, as is shown by the succession of muckraking exposés after 1900. Hardly a division of municipal and state government escaped from the regime of dishonesty. The whole tone of community life changed.

In building the curriculum of our schools, educational workers must make these transition years since 1890 stand out clearly. Youth must understand the fact that they are living in a new era, and they must understand the nature of this era. They must see that it is mentally and emotionally new, as well as new in the physical production of things. The resulting changes in our climate of opinion present the most fundamental problems which American youth confront today. Let me illustrate them briefly.

1. "BIGNESS AND BE-DAMNEDNESS"

The interest in the accumulation of things which has characterized American culture from the very beginning increased swiftly in this transition era. Note, for example, the astonishing rate at which automobiles were purchased. In 1890 there was not a single practicable motor in America; today there are more than 28,000,000! Each year the manufacturers whet our desire for a new car, a larger car, a higher-priced car, one with more style, more cylinders, more power. Not only one car — but two! Make America a "two-car" nation, chant their high-powered supersalesmen.

The lure of Bigness is revealed in every aspect of our urban culture. Skyscrapers compete for honors in height; corporations, banks, and merging industries grow bigger and bigger.

Community slogans reflect this trait. "The largest chair-town on earth"... "We light and heat the world"... "The biggest little city in the world"... "Watch us grow!" Social organizations, Rotary Clubs, churches, Sunday schools, neighborhood groups, all vie with one another in the race for size.

2. THE INCREASING TIME-BEAT OF LIFE

Almost a corollary to the urge for bigness is the drive to increase the speed of life. Even during the century of the frontier the intensity and rhythm of life steadily augmented. As the Industrial Revolution advanced, occupations, transportation, and communication molded the rhythm of the people to an ever higher time-beat and more rigid tension. "Shocking speeds" of twenty miles an hour made by the horseless carriages of 1900 gave way to legalized rates of forty and fifty miles an hour on cement highways. In the air nothing less than two hundred miles an hour satisfies the traveler's craving for saving time.

As engines and motors turned more swiftly and vehicles and messages got from place to place more quickly, the pulse-beat of the people responded. The whole nation came to demand more and more rapid communication, more instant service. The natural mode of human movement was changed. Riveting machines could strike a hundred blows while a mechanic with his hammer was striking five; hence it was that work in the new Industrial Revolution inevitably became faster and faster, noisier and noisier. It was inevitable, too, that people, particularly in cities, should come to live in a mental climate marked by high-speed nervous tension.

Moreover, the new climate revealed itself in a consuming interest in records. In every aspect of physical life individuals competed, trying to excel one another. They took nonstop airplane flights across the continent in eleven hours. They went eleven miles into the stratosphere. Up to the heavens and down to the lowest depths! For height, for depth, for speed they strove, taking as their objective anything that would establish statistical supremacy.

The theater, the movies, the daily and periodical press, reflected this increasing speed of life. Everything kaleidoscopic! The magazines announced at the head of their short short-stories, "Reading time: 8 minutes and 52 seconds." There were "shorts" in the movies, their rapid movement paralleled by the six-minute acrobatics and fourteen-minute operatics of the vaude-ville theater. Revolving stages were set for the drama so that no

time need be lost between acts. "Hurry! Save time!" marked the increasing restlessness of everyday life. Timesaving inventions were installed in factories; one stepped lively on urban trains; "Don't write, telegraph"; "Your suit pressed while you wait"; "Oatmeal — the three-minute kind."

3. THE RISING DEMAND FOR SERVICE AND EFFICIENCY

Under the leadership of industrial engineers the slogan of "efficiency" resounded through the land. Into every aspect of social life entered the concept of service. Hotels use it to hold their customers. George F. Babbitt has come to expect it from his tiled bathroom, his automatic oil-burning heater, his vacuum cleaner, his refrigerated house, his radio. The traveler on railroad trains demands a heated train in winter and an air-cooled train in summer. We have electric clocks that run forever, safety razors that dry while you shave, electrically driven phonographs with fifty records changed automatically, electrically controlled grand pianos, automatic window-closers and oven-lighters—service and efficiency everywhere!

4. THE DEMAND FOR IMMEDIATE PROFITS

The desire to get rich quick was also accentuated by the changing climate of these years. The tendency, of course, was deeply rooted in our early history, revealing itself, throughout the entire conquest of the North American continent, in demands for immediate profits. Recall the manner in which the pioneers on every frontier took immediate profits from the soil: they planted and harvested with no thought for scientific farming; they wore out the soil and left it, moving on to land farther west. For two hundred and fifty years the soil of every frontier was robbed in this fashion. During the same time lumber companies were taking immediate profits from forests, and were hacking down trees without let or hindrance, although during the same period the Germans and other European peoples were developing scientific reforestation. Men's greed for immediate profits took them also underground. Enormous quantities of coal were removed in such

wasteful ways as to leave even larger amounts forever below the surface. Owners of oil lands raced in swift competition to drain as much as they could from the bowels of the earth. Extravagance and waste marked the mining of the land because of this determination to take the greatest profit of the moment.

In our own times this desire for immediate profits is shown by the enormous waste that comes from supersalesmanship and the race for the consumer's dollar. Million-dollar advertising campaigns stimulate wasteful buying by artificially increasing the people's wants.

Craftsmanship declines among workmen, as owners demand hasty and superficial construction. Realtors set for the standard "The cheapest building that will stand for fifteen years." Make it quick. Turn it out in mass production. Make a million of them just alike, sell them cheap, make a vast profit immediately.

5. THE TENDENCY TOWARD DISINTEGRATION

As we have seen, the gospel of success developed fearful characteristics in some strands of the American mind. Stamped into the rank and file of the people, the doctrine of "win even at your neighbor's expense" has played a devastating part. But another loyalty absolutely inconsistent with this has also indelibly impressed the sons of competition and progress. This is the concept of conforming, of lining up. You can exploit, but you must give service; you can beat your neighbors, but you must cooperate with them.

Do we need to document the generalization? Very well, a few examples. Witness the common practice among reporters of the metropolitan press of warping the truth as needs demand; the slave-driving methods of regimentation which characterize thousands of business offices; the debauching of integrity on every hand in the mad race for dollars. Even the pulpit and the schools are marked by climates of fear and conformity. While preaching integrity, courage, loyalty to the finest elements in our American democracy, these institutions are actually conforming to the dictates of the economic and political interests in the community.

The inevitable result of acting upon this doctrine is a nation-wide atmosphere of hypocrisy. Widespread dishonesty pervades occupational, political, and social life, accompanied by deeprooted fears of insecurity and social disapproval. Not a single one of our institutions has escaped the taint of this hypocritical atmosphere. We profess to be one thing, but we are something very different. When the core of our national culture is thus hidden by a false exterior of respectability and conformity, the result can only be sheer racketeering. The youth of our cities are growing up in a climate of "getting something for nothing." The antagonistic ideas of competition, and of laissez faire conformity, are gripping the American mind and are producing a thoroughgoing climate of hypocrisy. Compete and conform — two mutually inconsistent ideas and ideals!

6. THE BUSINESSMAN SUPREME, THE ARTIST SUBMERGED

We are now in a position to understand the significance of another trend in the building of the American mind — namely, the submergence of the artist by the builders, the money-makers, the exploiters. With the man of affairs, rather than the creative artist, craftsman, or statesman, as the type most emulated by youth, the creative ability of men was centered upon the production of things. Uncle Sam was to be the Rich Man of the Earth, and so the builders made him. That America could produce the greatest creative culture in the history of the world never entered their heads. Looking back upon the trend, we see now clearly that, in the mounting whirlwind of economic exploitation, creative art remained at a low ebb.

On the frontiers this was understandable. Men had to be alert to the needs of the moment — to be constantly prepared against the possibility of Indian attacks, to obtain food, to maintain a shelter which would resist a hostile climate. Throughout their lives the frontiersmen were compelled to turn to the tasks nearest at hand. The intellectual was looked down upon, perhaps justifiably; there was little time for either design or aesthetic contemplation.

Similarly in growing industrial cities the hurly-burly of daily work provided little time for careful planning. Men thought but of securing monetary advantage. There was little interest or ability expended on either economic or social design, though lip service was given to the need for group progress through group co-operation. A mercenary society was producing doers of deeds and accumulators of things, whether on the frontier or in regimented offices and industrial assembly rooms. Perception and solving next-step problems were the principal mental activities, not creative or appreciative art. It is true that men generalized all day long. But they did so, not as a result of critical thought, but rather as the first reaction that occurred to them. Hence they came to look down upon abstraction and to think little of thoughtful design — either of the economic or the social system or of their own personal lives.

In the cities the necessary climate to nourish a creative attitude was almost completely lacking. This was true primarily because the moneyed middle class demanded that the art which artists painted, wrote, modeled, danced, or acted for them must be a symbol of their own power and prestige. Thus the artist was compelled to conform to the aesthetic standards of an exploitive society.

In small towns, where handcraft persisted longest, some workers retained the creative idea, but they were almost alone in maintaining the integrity of their labor.

A few great mutants also understood the creative act — Ralph Waldo Emerson, Walt Whitman, Henry Thoreau, Louis Sullivan, Alfred Stieglitz, to name only a few conspicuously important ones — and saw clearly how industrial commercialism debauched men's minds and souls. These men kept alive the spirit of honest craftsmanship. They wrote it in their poems, essays, and novels; they built it in their buildings; they painted it; they modeled it with their hands.

Finally they were joined by others, and a creative revolution began in the arts. Honest craftsmen in every medium of expression made their appearance at the beginning of the transition era. To name only a few, there were Frank Lloyd Wright and Louis Sullivan in architecture; Sandburg, Lindsay, Robinson, and Frost in poetry; Stieglitz, O'Keeffe, and others in the plastic and graphic arts; Anderson, Dreiser, Faulkner, Cabell, Frank, and Mumford, in prose-writing; O'Neill, Jones, McGowan, and Simonson in the new theater.

The Consequent False Hierarchy of Social Classes

These characteristics outline the newer climate of opinion of the urban civilization. Ushered in by mechanical inventions, the disappearance of the frontier, the rising tide of city growth, and the change in kind and amount of immigration, American traits in our cities have changed almost as much as our physical civilization. Their modification has gone deep, to the very foundations of our mental and emotional life. The climate of opinion has drastically changed.

The result of these changed attitudes was a new stratification of American society. A new hierarchy of social classes arose in which the city dominated the town, the village, and the rural countryside. Since above all else men valued success as measured by money and things, the promoters, the businessmen, the manipulators of money and debt, were in positions of leadership. On the top rungs of the ladder were these men of highest economic wealth and social prestige. Near by were their servants, the politicians and the bosses, representing municipal, state, and national governments. Next in the scale came leaders who had achieved economic successes in their professions, and then, occupying successively lower rungs of the ladder, were the middle-class and lower-class occupational groups.

Thus banker, promoter, politician, and "merchant chief" displaced the man of scientific and artistic insight in the estimation of the rank and file of the people.

The Unique Potential in the American Traits

These, then, are a few illustrations of the attitudes and traits that came to constitute the American mind. In spite of the heterogeneity of American society, it seems clear that there were built into the evolving mind deep-seated national loyalties, ideas, attitudes, and beliefs which were common to the various regions of the country. Fused together they created an individualism that is utterly unique to North America. While it was perverted by ambitious and scheming people into the vicious "rugged individualism" of the financial buccaneers, it always contained the potential germ out of which could grow a co-operative society of superior individuals. Its central attitude was that every American, regardless of race, color, or ancestry, is sure that he can make of himself whatever he sets out to make.

Thus American history, unlike European history, revealed an ever changing flux of groups which constantly blurred class lines. The very essence of this American outlook was its emphasis on classlessness. The men on the frontier and in the growing communities behind it believed and acted on the dictum laid down by their fathers that all men are created equal. The subduing of the wilderness brought men of all levels of economic and cultural status close together, and the concepts of the dignity of labor and the equality of the laborer ruled the behavior of Americans throughout their history. Thus the idea of a real ladder of opportunity, the rungs of which could be climbed by any and every American, was conceived as an actuality on every growing frontier and in every developing community that arose behind it.

It is of crucial importance, therefore, to understand that, at bottom and in spite of its manifest inconsistencies, the American tradition has always been focused on such constructive aims as build, develop, do it together, guarantee security and equal opportunity. It has definitely *not* been founded on the Marxian preachment of oppressed classes, class violence, dictatorship, confiscation, and the like.

Have These Loyalties Disappeared?

I am confident that that same emphasis on classlessness is held today by not less than 90 per cent of our people residing outside our greater cities. I except certain urban culture-islands within those cities which are still European-Marxian-oriented instead of North-American-oriented, and I grant that the large number of unemployed, including restless youth, constitute potentially the nucleus of a future revolt "class." But nearly all the others do not.

This conviction finds support in the current firsthand studies of such students as Sherwood Anderson, James Rorty, John Spivak, Alfred Bingham, Edmund Wilson, et al.; and they seem to me to be excellent face-to-face appraisals. These men, after separately mixing with run-of-the-mine Americans throughout the country, come to approximately the same conclusions concerning the absence of a "class" or "owner versus worker" psychology in the temper of the people.

They see "no revolution" in the offing; the "worker does not want to overthrow the government." They see America "puzzled," ignorant and bewildered, uncertain of problems, factors, or solutions, and governed by wishful thinking. The people on relief still "cling to their despairing hope that a man sitting in Washington will pull them out."

But the migratory worker "knows nothing about Communism." He merely "knows that 'red agitators' organize strikes." The docile white-collar worker, we are told, "took the brunt of wage cuts and unemployment without even raising a voice in protest." More important, the "white-collar man still clings to his air of aloofness, still considers himself better than the laborer." (A devastating blow at the notion that the white-collar groups will disappear into the proletariat!)

¹ Sherwood Anderson, Puzzled America; James Rorty, Where Life is Better: An Unsentimental Journey; John Spivak, America Faces the Barricades; Alfred M. Bingham, Insurgent America; Erskine Caldwell, Some American People; Morris Markey, This Country of Yours; Edmund Wilson, The American Jitters; Herbert Agar, Land of the Free.

As for the solidarity of the working class these reporters find "a realization everywhere among the workers of the rottenness of many of the old unions." Bingham comments on the vested interests and conservative, even reactionary, behavior of the American Federation of Labor.

They find "in the average American a profound humbleness. A hunger to do the thing together in some way is still alive in us." They hear, "Work — that's what we Americans want." There is "optimism" that jobs will return. The tone of the worker's comment is "It's my own fault!" (Not the owner's fault and folly!) The down-and-out American "does not blame his civilization. He feels that in some way he is not a good American because he has not risen above his fellows." "It's no time for belly-achers now."

Thus neither in the study of the process of government nor in the history of the American mind nor in current eyewitness appraisals can I find support for the Marxian dictum that the American people are divided today into two antagonistic conflict groups — a class of propertyless workers and a small but powerful propertied class — which will shortly fight it out between them.

They are, on the contrary, a kaleidoscope of many shifting groups, some of which from time to time are mutually exclusive and antagonistic, but most of which overlap in membership and interest and are both partly conflicting and partly co-operative. In our present state of democratic experimentation this is government.



Part III

SCHOOLS
OF THE
MACHINE AGE

WE HAVE now sketched two of the three chief movements that produced our modern society—the building of an efficient economic system and the establishment of experiments in democratic government. We are in a position, therefore, to consider the third—namely, the setting up of national systems of education in the industrializing countries. This third movement not only developed hand in hand with the other two; it was also in a very real sense regarded as the instrument by which their eventual success would be guaranteed. Certainly the basic assumption underlying the experiments in industrial and political democracy—that sound democratic government rests upon the consent of the governed—can be justified only by the economic and political education of the preponderance of the people.

This third social trend, therefore, focuses our study upon the first major problem which we have set ourselves in this book. That is, we must scrutinize carefully the kind of education that industrial society has created and measure it against the present conditions, problems, and needs of the people. Probably the most effective way to do this will be to see education in its historical background.¹

To that task we turn in Part III. In Chapters VI, VII, and VIII we shall study the rise of the American graded school and its program of education.

¹ Much of the historical material in the five chapters following appeared first in the author's "A Century of Curriculum-construction in American Schools," in the Twenty-sixth Yearbook of the National Society for the Study of Education, Part I, pp. 3-116 (Public School Publishing Company, Bloomington, Illinois, 1926). Acknowledgment is here gratefully made of the permission granted by the Society for the use of this material.

CHAPTER VI · THE RISE OF THE AMERICAN GRADED SCHOOL

A Century of Construction and Physical Conquest

In 1790 the American frontier was advancing through the Ohio valley. In 1890 the last frontier was obliterated. A continent had been conquered! The first crude physical pattern of the new nation was sketched in. The world's greatest experiment in democracy was under way. And the premise had been established of universal education at public expense.

In education as in economic life the initial task was to build the structure of the system. Citizens had to be persuaded that schools should be financed by public taxation. Legislatures had to be brought to the point of passing compulsory-education laws, health laws, laws controlling the housing, financing, administration, and supervision of schools. Teachers had to be supplied; hundreds of normal schools and state universities had to be created.

All these things were done in the very century that the economic system of the nation was being built. The parallelism between economic and educational construction, therefore, is clear. When the frontier disappeared and the First Industrial Revolution was finished, the task of getting children, teachers, textbooks, and equipment into schoolhouses had also been finished. As we shall see, there were serious mistakes and there was great waste. Nevertheless — when one considers the almost complete dearth of universal education in 1790, the presence in 1890 of 12,500,000 children in elementary and secondary schools, and of 160,000 in colleges and professional schools — the physical job was well done.

The Low State of Education in the Western World in 1790

At the moment of the ratification of the American Constitution and the inauguration of Washington as the first President, there was little in the national scene of any Western country to give promise of the vast educational developments that were to take place in the next hundred years. Without danger of exaggeration one can say that there was no education throughout the length of the Atlantic seaboard of North America of a publicly supported type which could reach a majority of the children.

One can go farther and remind oneself that this was characteristic of conditions throughout Europe as well. Nowhere throughout the so-called civilized world was there a system of universal education, supported by public taxation and taught by teachers trained in professional teacher-training institutions. In no large area of Europe was school attendance compulsory. Nowhere were there schools in which youth were practiced in tolerant openforum discussion of contemporary economic, political, and social problems. Nowhere was there community or individual education in the arts and sciences. Although it is true that, after universities developed, the students in some of the larger towns could be numbered in the thousands, yet it was also literally true that the ninety-and-nine of the total population had no contact with schools. A hundred years were to pass before the principle of public education would be established in England, France, and other countries.

EDUCATION IN THE UNITED STATES AT THE BEGINNING OF OUR NATIONAL HISTORY

One reason for this low state of education in our America was the disastrous effect of the Revolutionary War. We must remember that for more than twenty years the schools of the largest towns, as well as those of the rural districts, either were closed altogether or were carried on at best only intermittently. Even in the decades before the war, communities had been of little mind to endow education, and after the outbreak of hostilities in 1775 the meager resources of the colonial communities were exhausted by the steady drain for war purposes. The entire land was impoverished by the decade of turmoil, trade was at a standstill, towns and states were overburdened with debt, and quarreling among communities and among regions was widespread.

Such schools as did exist were chiefly for the children of educated and well-to-do citizens, for those who were destined by the circumstances of birth to enter the professions and to fill positions of leadership. In fact, after Washington took office, it was nearly twenty years before there was widespread recognition of the need to set up any considerable number of schools for the mass of the people. We must remember the poverty of the people, the sparseness of population, and each family's desire to utilize the energies of its youth to help in producing a livelihood. It was the time of the first interest in the Western lands; families were pulling up stakes and moving over the mountains, and the satisfaction of physical needs consumed most of their energy. Furthermore, the leaders had fixed their minds upon the task of building a strong central government, of arranging the difficulties between communities and states. Thus not until the settling of the continent had been well begun and the foundations for a stable central government had been laid did any considerable number of educational leaders arise to build a new public opinion about education.

Moreover, we must not be misled by references to laws passed in early colonial days, authorizing the establishment of public schools in every community. Most of these laws were merely "permissive"—they gave permission to the local communities to establish schools; they were not mandatory. Whether or not they were carried out depended upon the interest and initiative of the local authorities. Although sporadic instances occurred in which such schools were established, by and large education at the end of the colonial era was given only to the children of the moderately well-to-do.

Consider the fact, for example, that on the elementary level there were two principal kinds of schools—the dame, or petty, school and the "moving" school—and that each was a tuition school. Ordinarily the dame schools were kept by housekeepers who themselves had learned the rudiments of reading and writing and who taught in their homes the children of those neighbors who could and would pay a few pence each week for tuition. Certainly most of the children of the embryo states had little or no contact with these schools.

The moving schools, which taught reading and writing and reached up to the so-called "grammar" grades, provided a crude, intermittent kind of education. Their name derives from the fact that the school rotated from one district or hamlet of the township to another, three, five, or more times each year, with the result that children who attended such itinerant schools received only a month or two of schooling a year, sometimes only that much in two or three years.

The low state of education in 1790 is illustrated also by the condition of secondary schools. These were of two outstanding types, — the Latin grammar school and the academy, — both aristocratic in character. The Latin grammar schools were patterned closely after the English grammar schools, and were really preparatory schools for the colleges, of which nine were in existence. Even though their curriculums were primarily religious and linguistic, these schools were vocational in that they prepared for political leadership and for the ministry. It is clear, however, that, although they were financed in part by public taxation, they were "class" schools. They were open only to the children who could come already provided with an elementary education. Hence the anomalous situation arose whereby a school partially supported by the general public was open only to persons of the upper economic strata.

These Latin grammar schools had reached their highest point of popularity shortly after 1700. From then on they declined in number and influence, and by the time our national life was beginning in the latter part of the century they held little interest for the people.

It was, indeed, as a reaction against their limited offerings that the other type of secondary school, the academy, had developed near the middle of the 1700's. Early attempts were made in the 1720's to set up such new institutions along the lines of their prototype, the English academy, which had been founded especially for the children of religious nonconformists. In the American colonies their chief impetus came from the proposals of Benjamin Franklin and the creation of Franklin's Academy in 1751. The extent to which the academy was a departure from the Latin grammar school is shown by the emphasis upon modern languages, such as French and Italian, and upon the mathematical, scientific, and social studies which were included in the curriculum. Many of the original academies had English and mathematical departments parallel to the Latin department. But these "secondary" schools too, in spite of their liberalized, non-collegepreparatory offerings, were essentially "class" schools, because they were open only to those whose families could pay a fee for instruction.

Thus we have illustrated the statement that, at the moment of the creation of the new nation, the outlines of a national system of education had not yet been drawn. There were no public elementary schools, high schools, or colleges financed by general taxation and attended by any considerable proportion of the youth of the country. There were no systems of schools with professional administrative officers. There were no normal schools or other institutions which gave instruction in the art of teaching. Most important of all, there was no marked public opinion in favor of these things.

Indeed, the educational problem of the next fifty years was to build among the people a consciousness of the need for public education and especially to persuade them that democratic government could not succeed except on the basis of publicly supported schools for all the people.

The Beginnings of the First Industrial Revolution Set the Stage for Public Education

From the 1790's on, however, the dramatic changes that were taking place on the Atlantic seaboard and in the Ohio valley created conditions that made the formation of municipal and state systems of education inevitable. Everything was changing — ways of producing food and clothing, of building homes and public structures, of transporting people and their goods, of communicating, of buying and selling. Even the amusements and the play life of the people were changing. Thus the Industrial Revolution was getting under way at the very beginning of our national history.

GROWTH OF POPULATION AND THE RISE OF CITIES

The changes which it brought about are conspicuously revealed in the startling growth of population. In 1790 there were only about 4,000,000 people in the entire United States; in 1860 there were approximately 31,000,000. In seventy years the population had doubled and doubled and nearly doubled again, an undreamed-of development, caused by large families, by the improvement in sanitary conditions and in public health, and by the swift growth of immigration to the United States, especially after 1820.

As an inevitable concomitant of this tremendous increase in population, cities and towns were growing rapidly. In 1820 there were only thirteen cities of 8000 inhabitants; in 1840 there were forty-four; in 1860, one hundred and forty-one. The proportion of the American people living in cities and towns of more than 2500 inhabitants changed from 3.3 per cent in 1790 to 12.5 per cent in 1850.

In the meantime cities and manufacturing towns were rising in the Mississippi Valley as well as on the eastern coast. Chicago, a fort near which lived two white families in 1818, was a small town of 600 in 1832. As farms increased in the Middle Western states, trade increased, and Chicago and other communities grew by leaps and bounds. In 1850 railroads joined the Mississippi cities with the Atlantic centers, and in 1857 there were 100,000 people living in Chicago. Its growth was also being duplicated by that of Detroit, Louisville, Cincinnati, St. Louis, Pittsburgh, and others.

Hand in hand went population growth, town and city growth, industrialization, and the increase of machine labor; and these all contributed to the unification and socialization of a people who were therefore to find public education imperative.

A Growing Democratic Spirit Also Set the Stage for Public Education

1. POLITICAL DEMOCRACY, CONSENT, AND PUBLIC EDUCATION

Partly because of the coming together of hundreds of thousands of people in towns and cities, and partly because the swift advance of the frontier induced the development of democratic ideals, a widespread increase in democracy revealed itself.

Old aristocratic conceptions of government began to give way to a demand for greater political liberty. We must remember that not more than 3 per cent of the adult inhabitants had been permitted to vote in the elections of the late 1780's which ratified the new American Constitution. In most states only those who owned property and had affiliations with recognized churches could vote. Even as late as 1815 in only four states could all males over twenty-one years of age vote.

The new conditions of equality in the West, the formation of labor unions and other organizations in the East, and the ensuing widespread discussion and demand for the right to participate in public affairs led to a rapid extension of the suffrage in the first half-century after the ratification of the Constitution. Except for Ohio and Louisiana every new state which was admitted to the Union in this period guaranteed the right to vote to every adult male. After 1820 and especially after the election of Andrew

Jackson to the Presidency in 1828, there was a national movement to obliterate the lines between the social classes. By 1845 five more Eastern states had granted the right to vote to all their male citizens. Thus the American democratic idea was steadily extended in the building of the actual political machinery of the suffrage.

But the leaders of the time saw with increasing clarity that such a democratic government as was developing presupposed the intelligent consent of a vast preponderance of the governed. And the next step in thinking was to see that this intelligent consent could be guaranteed only by public-supported education. The school laws of the new states plainly reflected this idea. A typical one stated, for example, that "the mind of every citizen in a republic is the common property of society . . . it is therefore considered the peculiar duty of a free government, like ours, to encourage and extend improvement and cultivation of the intellectual energies of the whole." In the 1820's and 1830's civic leaders spoke frequently in this vein. Bills were proposed to legislatures, making "the first duty of the government...the encouragement of education." Labor unions asked for the formation of free schools, pointing out the neglect of education and showing how "a large body of human beings are ... rendered miserable in the extreme, and incapable of self-government."

2. EVIDENCES OF DEMOCRACY IN EDUCATION

By 1800 the combination of social and economic forces which we have sketched led to practical developments in public education. For the first time in America attempts were made to offer educational facilities to the children of parents who could not pay for them. These movements were influenced by four contemporary British movements — the Sunday-school movement, the development of "public-school societies" in the cities, the Lancaster-Bell monitorial movement, and the infant-school societies.

Although Sunday schools were organized during the late 1780's and 1790's, the movement did not take powerful hold for nearly

twenty years. Then, beginning with the Evangelical Society of Philadelphia in 1808, Sunday-school unions were organized in New York, Boston, Baltimore, and other cities. In the beginning the Sunday schools gave nonreligious instruction, but within a few years religious forces defeated this plan and took control of the movement, abolishing the secular teaching and giving only religious instruction. Even at its best the influence of the movement was small, for the teaching of those who attended did not extend beyond an hour or two a week.

Meanwhile "public-school societies" (privately financed organizations depending upon the contributions of well-to-do. philanthropically minded citizens) were developing in the cities. One of these, the Manumission Society, organized in New York in 1785 by Alexander Hamilton, John Jay, and other publicminded citizens, had for its leading purpose the giving of "the elements of an education" to the Negroes of that city. Other such societies for establishing "free schools" were organized about the beginning of the nineteenth century — for example, the Benevolent Society of the City of Baltimore for the Education of the Female Poor, the Philadelphia Society for the Free Instruction of Indigent Boys, the Public School Society of New York, the last named being the most important. This New York society was in existence nearly fifty years, during which time it gave some degree of education to more than half a million children and trained more than twelve hundred teachers with the limited teaching education of those days. The work of these societies in collecting moneys, erecting schoolhouses, teaching children, and training teachers was an important factor in arousing widespread interest in the cause of free public education.

The Lancaster-Bell Monitorial Plan

The economy and apparent success of the Lancaster-Bell schools in England appealed to educational leaders in the Eastern cities of America. The first school of this type in the United States was opened in New York in 1806, and others grew up rapidly in New England, as far south as Georgia, and as far west

as Detroit and Cincinnati. Indeed, the plan was so popular that in 1818 Joseph Lancaster himself came to America and spent many years here in developing his monitorial schools. These were the years in which towns and cities were growing and with them school populations. In 1800 Boston had approximately 25,000 inhabitants; Philadelphia, 40,000; New York, 60,000. The numbers of children of school age were, therefore, mounting rapidly, and the monitorial plan by which several hundred children could be taught the three R's by one teacher made an instant appeal.

Because of its economy the Lancaster plan seemed indeed an attractive makeshift for a more thorough education. In 1822, for example, the cost of educating a pupil in one of these schools was only \$1.22 a year in New York City; in Philadelphia at about the same time it was \$3. In those same years the cost per pupil per year in the private schools ran to about \$12.

One thing, then, the Lancasterian schools achieved. They made easier the task of persuading the general public to support schools for all children by means of general taxation. Their sensationally low cost was "news." Hence they facilitated widespread discussion of the need for education. Although fewer teachers were needed in such schools than in any other, it was clear to all that these teachers should be skillful and well trained. For this reason the monitorial movement stimulated the discussion of the establishment of teacher-training institutions.

Hence for a quarter of a century monitorial schools constituted an important step toward building up a general elementaryschool education.

Infant Schools

It would appear that the new country had no educational ideas of its own, for the "infant schools" of the time were also an imitation of similar ones in England. In this country they filled, for a time, a need created by the "class" nature of the grammar schools. As we have seen, the grammar schools were open only to children of about eight years of age, and were restricted in attendance to those who had been taught to read and write. Hence the infant schools helped to prepare children for these so-called English grammar schools.

The need for infant schools was not recognized in any widespread way until the second decade of the nineteenth century. In 1818 the municipal authorities of Boston appropriated \$5000 to establish infant schools for children of about four years of age. Within the next two decades other leading cities followed suit, New York and Philadelphia in 1827, Providence in 1828. In the 1830's the infant-school plan was being generally adopted and was gradually changing into what was to become the primary school of America.

Thus, as the years of the 1830's and 1840's went on, the complete elementary school as we know it today began to take shape. The infant schools gradually became the primary department. The English grammar schools were gradually merged with these to form the intermediate and upper grades. And, as we shall see soon, the high school was taking shape during the very same years. The general contour of the American school system was being molded.

3. Tax-supported Schools for All

The examples which have just been cited illustrate very clearly indeed the conflict that raged throughout the first half-century of our national life over the idea of democracy in education. This ideal of democracy is illustrated by the very method used to build state education systems supported by public taxation—namely, the persuasion of a majority of people rather than the dictatorship of a central authority. Political and humanitarian leaders pleaded with legislatures, wrote pamphlets, set up educational experiments, organized subscription societies, and tried out schemes in vogue in other countries; but no one proposed to set up a national system of education by governmental decree, as Germany and France, for example, were doing. Thus in education, as well as in politics and in other aspects of social development, the democratic idea of building real consent revealed itself.

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The growing agitation for school support through taxation had enlisted the great preponderance of leaders even by 1830. These men carried on campaigns throughout the country against the opposition of selfish owners of property, who saw no reason why they should contribute to the education of other citizens' children, and of those who failed to see the need for public education in a democracy. Working through every possible political agency, they sought to secure state laws providing general taxation for public schools. In New England they took advantage of the special sources of income which, even in colonial days, had been turned over to schools. There were, for example, the proceeds of liquor licenses, licenses of theaters in certain larger cities. taxes on banks and on occupations. State and national lotteries were then legal, and the proceeds from them also went to the schools. By the middle of the century in most of the states the right to levy taxes on the property of the entire state and to compel communities to open schools for all their children was well established.

The national government also stimulated the movement toward public support in a most important way. Certain sections of public land in each new township formed by the westward expansion were reserved for public education. Beginning with Ohio in 1802 each new state which joined the Union was granted the sixteenth section of the public lands in each subdivision for the support of "common schools," and in addition two whole townships of land which could be sold and the proceeds used to establish a state university.

This struggle for public education necessarily involved the settlement of conflicts — for example, the elimination of the charity and pauper schools and the decision as to the status of private and church schools. But "support" by public taxation was the main issue. Philanthropic education societies were shown to be transitional makeshifts, tolerated only because public education had not yet been established. The rate bill, whereby parents were charged in terms of the number of children they had in school, a plan which had been used in many of the states for a long time, was finally done away with.

One of the chief difficulties in the whole struggle was to persuade the people of local communities to accept state control, inspection, and supervision along with state funds. It was in this period of the early 1800's that the first state school systems were established under the direction of a state superintendent and a state board of education composed of representative lay citizens.1 It was the leaders from among these new state boards of education and city superintendents of schools who really won the fight for free, tax-supported public schools. Conspicuous among these were Horace Mann, the first secretary of the Massachusetts Board of Education, and Henry Barnard, editor of the Connecticut Common School Journal and first United States Commissioner of Education (1867-1870). In the Middle West the efforts of these leaders were extended by pioneer educationists such as John D. Pierce of Michigan; the Reverend Calvin E. Stowe (husband of Harriet Beecher Stowe, the author of Uncle Tom's Cabin) of Cincinnati; Caleb Mills, president of Wabash College, Indiana; Ninean Edwards of Illinois; and Robert Breckinridge of Kentucky. These men contributed much to the agitation for public education and to the organization of state systems of common schools in the Middle West. They increased the number of teachers, succeeded in establishing normal schools, and created a regular salary schedule for teachers. They not only got children into schools; they also continued decade after decade to increase the number of weeks in which the children were required to attend school, until by the end of the century an annual school term of thirty-six to thirty-eight weeks per year was common throughout the United States. They built better and better schoolhouses and developed systems of supervision and administration. We shall see later how they developed courses of study and added new subjects to the curriculum.

¹ In 1850 there were thirty-one states, sixteen of which had state school officers of one type or another. In 1861 twenty-eight of the thirty-four states had such central administrations, and ten of the states had created a county system of education in which a superintendent of schools administered the common schools of each county. By the same year twenty-five of the larger cities had systematized their community education under a city superintendent of schools.

Thus even before the Civil War the idea of a public-school system in every American community, paid for by the tax money of all the people and open to all the children, was well established throughout the entire country. By attempting through education to build understanding among the people of the problems of government, business, and social life, the foundation was being laid for the carrying out of the democratic principle that governments obtain "their just powers from the consent of the governed."

How the American Graded School Was Formed

In this way the stage was set for a unique educational system in the United States. To understand this system and the problem of its reconstruction, we must examine its most outstanding characteristic — namely, its graded, ladderlike structure. American school today is a graded school. A scheme has been built up whereby a child can enter school at the age of six or thereabouts and pass onward year by year through at least sixteen to eighteen annual stages of educational growth. He begins with the first grade (or perhaps with the kindergarten) and passes on uninterruptedly through the elementary school. He then continues an unbroken career through high school. He can do all this in publicly supported schools to which he pays no tuition. He can then, granted that he has the means of financing his livelihood, pass through four or more years of college education in his state university or normal, agricultural, or engineering school, with the payment of only a nominal tuition. Thus a sixteen-year to eighteen-year scheme of education has been built, the result of a hundred years of campaigning for popular education. In some communities he can continue his work even farther in adult-education classes, open forums, and the like.

It is now our task to understand how this system arose, reaching from the kindergarten to the adult-education institute.

THE GRADED SCHOOL, IN PART A NATURAL, NATIVE DEVELOPMENT

The division of the American school system into grades was the inevitable result of a combination of factors. One of these was increase in numbers. As long as children were few and far between, as in the rural districts, children of various ages and stages of development could be "taught," directed, guided, by a single teacher. Even in such a situation, however, as is seen in the experiences of the present one-room rural school, the teacher was inevitably compelled to do a certain amount of grouping, or "grading," of the children because of the divergencies in their development. Those who were just learning to read or write or spell or "reckon" could not be taught at the same time and with the same methods as those who had already mastered these skills. Therefore, as long as the numbers of children remained small, the old-fashioned "individual" method, by which the master called the children one at a time to his desk and heard them recite their lessons, was used and seemed to work very well.

With the coming together of large numbers of children, however, groupings became necessary. Hence, even in colonial times, we see examples of "grading." The grammar schools had long recognized the division of the children into levels of attainment. The Lancasterian system did likewise. The old district school recognized a division of the children into first, second, third reading, spelling groups A, B, and C, arithmetic A and B, geography A and B, and the like.

Between 1820 and 1850 the common school was divided into either three or four levels. These divisions were called by somewhat different names, although in general a classification like the following was used: Primary, Intermediate, Grammar, and High, or Primary, Secondary, High, or Primary, Secondary, Grammar, High.

Furthermore, each of these divisions was gradually and rather naturally divided into subdivisions. For example, in the Boston

reading grammar schools in 1823 there were four classes: lowest class, which taught reading, spelling, and accentuation; second class, which taught those subjects plus "grammar memorized"; third class, which taught the same subjects as the second plus "grammar learned"; and highest class, which taught the same subjects as the third plus geography. This school was paralleled by another school, called the writing school, in which, however, the pupils were not divided into "classes." The pupils divided their time between these two schools, morning and afternoon. Below these two schools was the primary school, with reading and writing, each of which was divided into three classes. Even in the 1820's, therefore, the whole scheme presented a skeleton of the ten-year elementary school. At this time, however, one teacher taught all the pupils of all four classes in the reading grammar school, another taught the three classes of the reading primary school, and still another taught the three classes of the writing primary school. Not until 1848 was a separate teacher put in charge of each of the four subdivisions of the reading grammar school. Eight years later, in 1856, a separate teacher was assigned to each of the three years in the primary school.

One chief impetus for the assignment of separate teachers was the building of a new type of elementary school, examples of which, like the Quincy Grammar School of Boston (1848), began to appear about the middle of the century. Formerly school buildings seated children in one large hall, some of the work being done in adjacent small classrooms. Each teacher in such a school had assistants, generally two or three in number, who carried on their work in the small rooms, while the teacher himself managed most of the children in the school in the main hall. The Quincy Grammar School was entirely different architecturally in that it consisted of twelve separate classrooms. Children of approximately the same age and stage of development were assigned to one room and were under the complete supervision of one teacher. This school, with its separate schoolroom for each teacher, with its hall large enough to seat all the children of the entire school, its little cloakroom attached to each schoolroom, its separate desk and chair for each pupil, was the model which was subsequently

widely copied in the building of elementary schools in different parts of the country.

We see in all this that the American graded-school system was in part the result of natural, native development. Population growth and economic, social, and geographic conditions were some of the bases for the scheme of classification and housing of children which evolved.

2. THE GRADED SCHOOL,

PARTLY EXPEDITED BY EUROPEAN INFLUENCE

The graded plan was also, however, influenced by the Prussian graded-school system, which was a thoroughly developed and standardized institution by the second quarter of the nineteenth century. In the 1830's advocates of national schools in France, England, and America visited and closely examined these Prussian schools. Among these visitors was the eminent French student of education, M. Victor Cousin, whose famous Report on Education in German Lands, published in America in 1835, led many American pioneers to visit German schools. This and other reports were widely read, and they greatly speeded the grading and classification of schools. As early as 1803 John Quincy Adams described the educational system of Silesia. In 1821 the Free School Society of the City of New York appointed a committee to investigate schools in Europe and in the United States. John Griscom's A Year in Europe (1819), the letters of William Woodbridge, who spent the years 1825-1829 in Europe, Calvin E. Stowe's Report on Elementary Education in Europe (1837), and Horace Mann's seventh report (1843) are conspicuous examples of the influence of the German graded school upon the minds of the leaders who were modeling the American system. These leaders wanted strong, well-organized systems of schools. The Prussian schools were that, and their example of efficiency lent great force to the arguments of American leaders.

Furthermore, there was a close enough resemblance between the eight-year *Volksschule* of Prussia and the gradually emerging scheme in American communities to help the leaders to clinch their evolving plans. Hence the systematizing of schools in the Middle West under the influence of Stowe, Pierce, Edwards, and Breckinridge, and in the East under Mann, Barnard, and others, was greatly speeded up by the example of these Prussian schools, which seemed to some of the leaders to be "the most perfect in existence."

Not only in the grading of schools but also in the setting up of systematic state systems with central boards of education and state executive offices, in the development of normal schools for the training of teachers, and in the building of efficient systems of supervision the example of the Prussian schools was a real force.

That the imitation of the Prussian system throughout the United States was not complete and direct is perfectly clear. Unique conditions in different parts of our developing country produced widely varying schemes. The elementary schools of New England evolved into a nine-grade scheme with kindergartens eventually added at the bottom. On the other hand, several Southern states and even the large Middle Western city of Kansas City, Missouri, adopted a seven-year elementary plan. Between these extremes the preponderance of schools eventually followed the eight-year plan. In this respect they resembled the final form of the Prussian Volksschule, although even this resemblance is obscured by the different entering age.

Thus it was inevitable that our system should be only in part indigenous to our soil and our mental climate. Having its roots in European culture, the outlines of the system were naturally copied in part from abroad. Nevertheless the virgin continent, its isolation from Europe, its history, and the uniqueness of its physical and mental conditions produced something peculiar to America. Furthermore, we see a great variation in the types of grade schools all over our country — a variation that in education as in every other aspect of social life reflected her democratic individuality.

3. OUTCOMES IN ELEMENTARY EDUCATION

What were some of the outcomes of all this flux in educational organization? Mainly there was a change from the old system, in which one teacher taught all subjects to pupils of all ages, to a graded system with an annual promotion scheme in which children of approximately the same age were together all day with one teacher who taught everything in the curriculum. In the latter half of the nineteenth and the early part of the twentieth century this plan of grading and grouping was to be extended farther. Children of the same age were still to be kept together, but the schools were to be departmentalized. As a result of this scheme children were grouped approximately according to age, but were taught by several different teachers. One teacher taught mathematics, another history or geography or both, another language, another the sciences, and so on. Subjects were assigned definite periods in the day, and the work of the departmentalized teachers was allocated to these periods. And all these developments arose gradually and naturally from the first graded school.

4. The Development of the Free Public High School

During the same years that the elementary school was taking this shape, the public secondary school of America — the high school — was also gradually emerging. As we have learned already, the movement for free universal education was not aimed merely at the setting up of elementary schools. The leaders visualized a complete scheme of education from childhood to adulthood. Hence the half-century preceding the Civil War witnessed the development of two chief kinds of secondary school — the academy, a private tuition school, and the free public high school. From now on we can ignore the Latin grammar school, which had served throughout colonial times. By 1800 it had practically disappeared.

The Academy

The academy offered the bulk of the opportunity for secondary education in America from the time of the formation of the Union until the close of the Civil War. Under the impetus of Franklin's Academy, founded in 1751, the famous Phillips Exeter Academy and Phillips Andover Academy, Germantown Academy, and several others the new type of secondary school spread rapidly. In 1800 there were 102 of these academies located in eight states—Maine, New Hampshire, Vermont, Massachusetts, New York, Maryland, North Carolina, and Georgia. In the next twenty years 265 new ones were established, and between 1821 and 1840 we find 449 more. So swiftly had the growing communities of the expanding West demanded the new secondary education that by 1850, the high point in the development of the academy, there were 6085 of these institutions with 263,000 pupils and 12,260 teachers.

Although the academy offered so-called "practical" courses of studies, such as algebra, astronomy, chemistry, surveying, United States history, general history, and debating, colleges with their entrance requirements continued to make the academy a college-preparatory institution as well as a nonpreparatory school.

Moreover, the academy was still a private school and hence a class school. It was indeed somewhat of a transition type, not being so thoroughly an aristocratic institution as had been the Latin grammar school, but certainly not being sufficiently democratic to meet growing needs. Democracy was rising all over the country, and the demand for free higher schools was growing.

The High School

The response came in the organization, in 1821, of the first American public high school. This, originally called the English Classical School of Boston, became, after 1824, the English High School. Within the next few years other cities and towns in New England and in the Middle West, many of them influenced by the Boston plan, developed free public high schools. States began to pass laws requiring a high school in every town of a given size and

stipulating that certain subjects should be taught. By 1850, when there were 6085 academies, there were approximately 500 such schools in America. From that time on, the number of academies slowly declined, and the number of free public high schools increased. In 1880 there were approximately the same number of each, something less than 3000. By 1900 there were more than 7000 high schools, and in the meantime the number of academies had dwindled to fewer than 1500. In the first three decades of the twentieth century the public high school spread even to the smaller communities. Today there are more than 18,000 of them in the United States.

In Retrospect

Thus by 1890 not only had the frontier been obliterated and the continent conquered, but also the world's greatest experiment in government based on democratic consent was in progress. And for the first time in history the experiment was founded upon the premise of universal education at public expense.

Nothing is more important to understand about this first hectic century of building a system of public education than that there was neither time for prolonged reflection about education nor a stable milieu in which to establish it. As we have seen, the whole mood of America was that of the quick erection of a physical civilization. The building of schools was done under the familiar drive of "get it done"...hustle...bigger and better buildings . . . million-dollar high schools to which the citizens can point with pride. The construction of school buildings and the design of the curriculum were undertaken in the same spirit as the laying down of railroads or the swift building of crude habitations. There was no thought for permanence. Everything was hurry and superficiality. There was no time for design, no attempt to fit the schools to the precise conditions of the new civilization, no mood for meditation and reflection. The very century that had witnessed the clearing of the continent had seen also the development of the public elementary and secondary school, and these, like Topsy, "were not born"; they "just growed."

The course of the feverish development of this century is clear: industrialism, urbanization, rapid transportation and instantaneous communication, machines, and mass education produced factories, cities, and the graded school. The itinerant and dame schools of colonial days were swamped by the ever increasing hordes of youths. The makeshifts imported from England were inadequate to meet the new situation. Hence the last three quarters of the nineteenth century witnessed the setting up of the graded public-school system as the solution.

What, then, had this hundred years of school construction accomplished?

School buildings for all children from the ages of six to eighteen.

A twelve-grade scheme of education.

A continuous ladder of educational development divided (with some exceptions) into two major types of schools: an eight-grade elementary and a four-year secondary school

Free, tax-supported public education.

Universal elementary education as an accepted American doctrine.

Public secondary education and even higher education at public expense, also as an accepted American principle.

The groundwork for carrying into practice the American idea of providing equal opportunities for all to develop to their maximum stature — the very foundation of the American tradition.

In short, in 1890 a rigid Procrustean bed of grades — as the school reformers of the 1870's and 1880's were fond of calling it — had been prepared. Mass education, like its counterpart economic mass production, was ready for standardization, for crystallization.

And what of the curriculum of this mechanized and physical enterprise? What did the children do? What did the young people study? Were they introduced to the mounting problems of the new civilization? Were they practiced in tolerance and skill of generalization? Were they given opportunities for creative expression?

We shall see, as we turn next to a discussion of these questions.

CHAPTER VII · THE CURRICULUM

OF THE GRADED SCHOOL: HOW IT EVOLVED

Four Conceptions of Mass Education Which Will Guide Our Study

To understand the program that this first century of educational development produced, we should consider four conceptions of education which gripped the minds of those who made the first schools.

- 1. Education is what takes place in a schoolhouse, five hours a day, aloof from the community and national life which created it; that is, being educated and going to school are synonymous.
- 2. Education is something you do before you enter your lifework. It is preparation for life. For some children this preparation will last only six or eight years; for others, twelve; for the select few, from sixteen to eighteen or more. But for all it is a getting-ready, not a doing-now.
- 3. Education is something you do with words and other symbols; it is the acquiring of skill and mastery over words, mathematical signs, and the like.
- 4. Hence the curriculum is a body of facts and principles which man has discovered and which his children learn in the formal school.

The influence of these conceptions has been such that, as the graded school arose in the nineteenth century, a definite kind of graded curriculum emerged with it. It arose in comparatively the same form in every "modern" country. The character of this curriculum has already been sketched: it went on in a "school day" which was a succession of "periods," twenty to forty minutes in length, marked by the ringing of bells and the passing of pupils or teachers from room to room. The intervals between

bells were given over to a score of school "subjects," each allotted its special amount of time. (In England the curriculum is indeed called a "timetable"!) These "subjects," or compartments of knowledge, were stratified horizontally to fit the chronological grading of boys and girls.

The curriculum is therefore seen as something abstracted for the real, active life of the individuals being "educated"; something partial — set aside from the ongoing stream of existence; a preparation, an unrealistic discipline for hypothetical situations which students might be called upon to meet in the future. It was not what went on in the family, the neighborhood, the occupational life of the community. It was not the practical doing of family chores or the social activities of churches, clubs, and the like. It was not an essential part of one's entire life. It was merely the learning of "subjects" during the "periods" of the "school day."

I. Textbooks, Courses of Study, and the Curriculum

1. How Textbook-writers

Molded the First Programs of Study

From the beginning of our national schools the outlines of their curriculums have been marked out by the scope and content of textbooks; and these books have exerted a primary influence on the division of the school day into school "subjects."

In 1783, the very year that the Treaty of Paris made over the thirteen American colonies into thirteen independent states, Noah Webster published his American Spelling Book. From that time to this it has been nicknamed, because of its cover, "the blue-backed speller." Almost at once it took the place of the heretofore popular New England Primer because from the standpoint of teaching it represented a more effective arrangement and because it provided compact and organized material for two subjects — reading and spelling. This new type of book launched an epidemic of textbook-writing — the making of readers and

spellers, primers, "preceptors" and "orators" (compendiums of pieces to be used in declamation), arithmetics, grammars (frequently known as "Accidences" or "Guides to the English Tongue"), geographies, histories of the United States, and the like. There were examples of all of these before 1800.

These textbooks, written with the authority of persons of prestige, presented, in clear and compact form for "teaching," the facts and the skills which both teachers and citizens thought education should consist of. Hence they were adopted swiftly, and were religiously followed in the conduct of the schools. Note a few examples:

Webster's American Spelling Book; his Little Reader's Assistant, written in 1790; the Franklin Primer and the Columbia Primer (1802); graded reading books like the American Preceptor and compendiums of classical selections like the Columbian Orator; these supplied the schoolmasters with the content of their "lessons" and hence of their curriculum.

The same thing happened in arithmetic, in grammar, in geography, and in history. Nicholas Pike's Arithmetic (1788), used in the universities, set the standard which was imitated by briefer "school" arithmetics. Three decades later Colburn's First Lessons in Arithmetic on the Plan of Pestalozzi replaced many of the older texts because of its excellence in organization and because of its teachableness. It served to entrench arithmetic as one of the indispensable subjects of the elementary school.

Thus, though numerous subjects of study entered the curriculum between 1825 and 1850, the three R's — reading (plus spelling and declamation), writing, and arithmetic — remained and, indeed, became the very "fundamentals of education." In every recurring economic crisis from that time to the current one of the 1930's unthinking citizens have tended to use as their slogan "getting back to 'the fundamentals' by discarding the 'frills'" whenever financial retrenchment was sought. These rudimentary skills have dominated a century of curriculum-making.

Grammar established itself as a separate subdivision of the vernacular, with composition writing, spelling, and rhetoric, through the instrumentality of Lindley Murray's Grammar of the

English Language (1795) and Caleb Bingham's Young Lady's Accidence (1799). Slowly at first, but after a few years more rapidly, these books were adopted for class use, and periods in the time schedule were set aside for the new subject of "grammar."

This emphasis upon reading, writing, and arithmetic, upon the reading of books, and in general upon words must not lead us to overlook the fact that there were also interjections of new "subjects" into the curriculum. Under the influence of new textbooks, geography and history were accepted as new types of subject matter. In 1784 the Reverend Jedediah Morse's Geography Made Easy and eleven years later his Elements of Geography provided material which gradually came to be accepted as a necessary part of the curriculum. Morse's textbooks were huge systematic tomes, emphasizing the various motions of the heavenly bodies, describing the earth and its great land and water divisions, bounding states and empires, and describing soil production in inhabitable regions. They were just what the schoolmasters were looking for - encyclopedias of facts about the physical world. They became, indeed, the progenitors of the compendiums of reference from which young people, even to the present day, obtain their knowledge of contemporary modes of living. In these texts a new and domineering subject of study. "geography," was in the making.

History wedged its way into the pigeonholes of the course of study in the same manner. The first geographies included historical material. Indeed, as late as 1853 S. G. Goodrich (the famous Peter Parley) entitled his textbook First Book of History Combined with Geography, Containing the History and Geography of the Western Hemisphere. Long before that separate pamphlets presenting brief histories of the United States began to appear. In 1822 C. A. Goodrich's History of the United States and ten years later Webster's History of the United States definitely marked out a new subject-matter territory in the evolving curriculum.

Furthermore, civics made a special place for itself in the same manner. Under the growing demand for material dealing with the American Constitution, Webster presented an elementary treatment in his history text mentioned above. Thirty years later the study of the Constitution as a means of developing patriotism guaranteed that civics would shortly become a regularly accepted subject of study. Separate civics texts had appeared long before this, however. One Elhanan Winchester had published the first one in 1797 in the pious attempt to counteract the dangerous trend toward democracy which he saw in Jeffersonianism, and there still exist today about a dozen other texts of that time. The subject has always been chiefly a study of state constitutions and the national Constitution. It has always been most popular in courses of study which are made just subsequent to national conflicts such as the Civil War and the World War.

Even in the earliest years certain "practical" subjects also were making their way into the curriculum. For example, sewing and knitting and darning became generally accepted as requirements of the elementary school for girls, even in the early 1800's. The course of study of one system was frequently adopted in others. As an illustrative consequence we see the widespread practice of requiring every girl to make a "sampler" as the climax to her sewing work.

On the side of conduct the religious instruction of the colonial schools had given way to such items in the course of study as "Good Behavior," and "Manners and Morals." In addition to texts in these subjects, any text in reading or even in geography or history demonstrates the influence of textbooks on questions of morals and conduct. All the books to which the children were "put" were intended to make them moral and virtuous.

2. The Role of Economic Competition in Textbook-writing and Curriculum-making

The doctrine of *laissez faire* showed itself in the building of the new school curriculum as well as in the economic life of the community. Private initiative appears conspicuously in the writing and publication of textbooks and indeed in the manufacture and sale of all school materials. Even to the present day, with the exception of such inconclusive experiments as the state manu-

facture and adoption of textbooks, the need for these things has been met by energetic individuals. Competition has been the order of the day in publishing textbooks and securing their adoptions, just as it has been in the securing of contracts for building schools, in selling land to the community for educational purposes, and in making and selling all school commodities.

Much of the writing and publishing of the early, as well as of the later, schoolbooks has therefore been motivated by the competitive urge and the prospects of a large private income. That the business was lucrative is shown by the vast sales of many of the widely used books. Witness Webster's Speller selling at the rate of a million a year in the 1840's — indeed, almost that many were sold in 1890; the huge sales of Colburn's First Lessons in Arithmetic; of Murray's Grammar; and of C. A. Goodrich's History of the United States, which by 1860 had sold more than a half-million copies and had gone through more than fifty editions.

3. LAISSEZ FAIRE IN TEXTBOOK-WRITING

Here, then, was laissez faire in textbook-writing and textbook-publishing; here inevitably was laissez faire in curriculum-making also, because the books were determining the content of the curriculum. Individuals were left free to write books and offer them to the educational public for adoption in schools; the schools gave little advice and made almost no demands. The curriculums of the school changed as new textbooks assembled new bodies of facts and skills. As early subjects became entrenched, it became harder and harder, of course, to interject new subjects and oust older ones. The history of a century and a half of curriculum-making shows, however, that sooner or later new textbooks replace the old ones and that the content of the new ones largely determines the content of school instruction.

Would not such a situation serve to put certain authors and publishing houses in control of the curriculum? Would it not tend toward the perpetuation of existing materials, books, and bodies of subject matter? Or are publishers and authors apt to be alert to social change and to remake their books constantly to fit the changing life of the people? Would they tend toward continuous reconstruction, advance, and improvement of the curriculum? To make a sound estimate of the school curriculum we must find the answers to these questions.

II. The Curriculum Was Made by Making School Subjects

"Courses of Study"
 Showed the "Subject" Nature of the Curriculum

Early in the history of the graded school the practice developed of issuing printed "Courses of Study," which informed parents and citizens of the nature of the work done in the schools. Examples of these early courses of study which are still in existence enable us to trace the historical development of the curriculum itself. They state the subjects which were taught, and frequently give the authors and titles of the textbooks which determined what was to be taught. For example, in those which were used shortly after 1800 in New England and New York, we find recurring reference to the fact that "the Principle part of the Instruction will consist in Spelling, Accenting, and Reading . . . a general knowledge of English Grammar and Composition; Also writing a good hand . . . Arithmetic through all the previous Rules" and so on. We find other references - Bingham's Young Lady's Accidence, Morse's Geography, the Holy Bible, the American Preceptor. Inspection of other early courses of study shows the additions in the grammar grades of such subjects as bookkeeping and epistolary composition in the 1820's and 1830's. In the 1840's music makes its appearance as a subject in the primary schools and also in the grammar and intermediate schools. It is in this decade that frequent reference is made to United States history, the United States Constitution, practical ethics, declamation, and general history. Thus early courses of study describe the beginnings of the curriculum of the "common schools."

In the third quarter of the nineteenth century these subjects

maintained themselves as the foundation of the course of study. Slowly additions were made: geography, the Constitution, elementary science, drawing and music, and physical training.

Another quarter-century passed. Reading, writing, arithmetic, and spelling continued as the basic subjects, and language, geography, history, and grammar had entrenched themselves as a second core. Occasional new and "practical" subjects continued to be injected into the course of study — nature study, sewing, cooking, and manual training. Thus by 1900 the entire elementary course had formed into nearly a score of narrow, rigid school subjects.

2. THE ELEMENTARY CURRICULUM

In 1775 at the outbreak of the Revolution the three R's constituted practically the total curriculum. Seventy-five years later the graded school had become an actuality. The three R's still dominated the curriculum, but other subjects had firmly established themselves — language and grammar and the geography and history of the United States. In a few courses such "practical" subjects as bookkeeping were offered.

But it was the last half of the nineteenth century which witnessed the great influx of "new" subjects. Nature study and elementary science introduced young people to the physical and natural world about them; sewing and cooking for girls and manual training for boys were grudgingly accorded a place in the program; physical training indicated the beginnings of body education; and the formal teaching of drawing and music foreshadowed years of agitation for the inclusion of the arts.

3. THE SECONDARY CURRICULUM ALSO BECAME A MOSAIC OF SUBJECTS

The steps in the evolution of the high-school curriculum paralleled those of the elementary school. Writers of prestige were constantly preparing new textbooks, and these were being adopted by school boards and teachers. We find references, for example, to Euler's Algebra, Lacroix's Arithmetic, Legendre's Geometry, Wilkins's Astronomy, Worcester's Ancient and Modern Geography, Murray's Grammar, Flint's Surveying, Hedge's Logic and Conversations on Chemistry. Learning and teaching rarely exceeded the bounds set by the content of these books, but even so the number of subjects increased steadily.

The academy — the older, well-established secondary school - was originally organized, as we have seen, as a non-collegepreparatory institution; gradually, however, like the earlier grammar school, it offered primarily preparation for college. It continued, nevertheless, to offer its former "practical" subjects. Thus it was quite general by 1825 for the curriculum of the academy to be divided into two departments - classical and English. The classical curriculum confined itself largely to such subjects as Latin, Greek, geography, general history, natural philosophy, logic — all college-preparatory subjects. The English curriculum, on the other hand, offered a wide variety of those subjects considered to be of more immediate utilitarian value for example, English, reading, writing, arithmetic, bookkeeping, elocution, accounting, public speaking, French. Note, however, that linguistic materials still dominated both these curriculums even to the end of the nineteenth century.

From the 1820's on, when the leadership of the academy was being supplanted by that of the high school, the English course came to predominate. It developed rapidly between 1825 and 1850. New textbooks were adopted, and places in the curriculum were provided for their study as new subjects.

4. NEW SUBJECTS AND CURRICULUMS

This was indeed the era of subject-making in the course of study. Each community was a law unto itself, and with astonishing rapidity new titles of subjects or courses found their way into the printed programs of study. Actually seventy-five new and different titles were injected into the scheme of secondary instruction in the three years between 1825 and 1828. This does not mean, of course, seventy-five bodies of subject matter that were mutually exclusive in content; it means seventy-five titles,

each one representing some special modification, phase, or aspect of a study. All kinds of history entered the curriculum, various brands of mathematics, all the varieties of philosophy (natural, moral, what not), botany, zoology, rhetoric, Greek and Roman antiquities, the modern languages. Continuations and extensions of elementary courses were offered under the qualifying term "advanced"—for example, advanced arithmetic or advanced geography. A survey of the academy curriculum in the second quarter of the nineteenth century shows more than a hundred different subject titles. This, then, was the organizing-programing period in the rise of the secondary school.

After the middle of the century new titles came increasingly from the sciences. Geology, botany, chemistry, astronomy, physical geography, moral science, zoology, anatomy; these all came to occupy an increasingly conspicuous place in the program.

The variety of high-school curriculums is as impressive as the number of new subjects which they included. Whereas the Boston Latin School in 1820 had only seven subjects, the Boston English High School in the next year offered twenty, including such new ones as plane trigonometry, mensuration, surveying, navigation, and chronology. The subject curriculum of Hartford, Connecticut, in 1848 included more than thirty separate subjects, some of the additions being physiology, natural theology, vocal music, history of literature.

Thus the high-school curriculum, like that of the elementary school, became a bewildering mosaic of academic subjects. In Massachusetts before 1861 the curriculums of sixty-three towns reveal seventy-three different subjects. For more than a century the curriculums of the American schools evolved by adding new subjects of study.

5. THE MULTIPLICITY OF SUBJECTS LED TO GROUPINGS INTO PARALLEL COURSES

By the 1870's and 1880's the bewildering array of subjects had led colleges and secondary-school administrators to attempt their organization into orderly and continuous courses. Gradually the plan was devised of requiring students to take a sequence of subjects through the four years of the high school. The colleges aided in this movement by slowly recognizing new subjects for college entrance and by adding new degrees with more liberal entrance requirements — for example, bachelor of science, bachelor of letters, or bachelor of philosophy in addition to the long-established bachelor of arts.

Paralleling the original classical or English curriculum there were evolved such modifications as these: General-English, Commercial-English, Latin-Scientific, Scientific, Scientific-English, English-Science, English-Latin, English-Commercial, Engineering Technological, General Science, Latin-Science, Modern-Classical, Manual Training, College-Preparatory, Business, Preparatory-English.

This method of reducing confusion to order merely served to standardize the instruction of our young people. They were required to take four or five subjects during each of the years which came to constitute the new four-year course. Many subjects had to be taken in sequence, notably various year-courses in English or in modern languages, in the sciences or in mathematics. In the last, for example, the order was algebra, geometry, trigonometry, analytics, calculus.

In this way another step had been taken toward casting the secondary-school curriculum into a rigid mold of academic compartments. Thus the idea of the curriculum as a predesigned, prestated body of knowledge was put into effect.

III. College-Entrance Boards and State Examining Boards Add to the Standardization

As we look back upon the history of the subjects of study which came to constitute the curriculum, it appears that every agency co-operated in its standardization. Not only did the text-books, allotments of specific periods of time, and the formation of four-year courses tend toward standardization; two adminis-

trative agencies contributed to it also—state boards of education and college-entrance boards. Because these agencies secured a control over the curriculum which they maintain even at the present day, we should note their history briefly. First let us see the standardizing effect of the state boards of education.

I. STATE APPRAISING BOARDS STANDARDIZE THE CURRICULUM

The history of the state boards reaches back to the years before the first administration of George Washington. In the year 1784 the first of these boards — namely, the Board of Regents of the University of the State of New York — was created to establish and to control all schools and colleges within the state. Other acts in later years added to its authority, so that it could not only establish schools but could also inspect, appraise, and examine their work. From that day to this the "regents," as they are now known, have become all-powerful dictators over the education given to children in the public schools of the state of New York.

In the early days their power lay in their control over state school moneys, which they granted to communities in proportion and according to how well the latter lived up to the conditions they set. This power was wisely used in these early decades of our national history for the widespread establishment of academies and high schools, and little attempt was made to prescribe courses of study. The regents were liberal throughout the first half of the nineteenth century, recognizing the great variety of school subjects which were offered in the various schools. Thus as long as schools remained small and were comparatively few, the regents exercised on the whole a wholesome and stimulating influence.

With the rapid growth of both academies and high schools, however, and with the increasing inability of the officials of the state board personally to inspect the schools of the state, mass examinations were introduced. This occurred first in 1864. Steadily from that time on the regents enlarged their control by prescribing the amount and character of instruction offered in

the schools and by requiring pupils to pass state examinations in order to graduate from secondary schools (later also from elementary schools). By 1880 this New York state board had extended its control over the content of the curriculum to the point of issuing state-wide syllabi. These syllabi prescribed the subjects, the amount of time to be devoted to each, and at least the major topics within each. In 1890 the standardization went farther, the board prescribing, by a system of "counts," the kind and amount of material to be studied. Each count represented ten weeks' work, including five recitations a week. Definite subjects were thus prescribed (English, German, French, Latin, Greek, mathematics, science, history), and a mathematical scheme of credits was worked out for each one.

Other states, although lagging behind New York in point of time, also established state boards of education and endowed these with a large amount of control over the common schools. Throughout the latter decades of the nineteenth century the practice of issuing state-wide syllabi, which prescribed much of the subject content of the curriculum, was extended throughout the country.

2. College-Entrance-Examination Boards Complete the Standardization

Most of the state examining boards exempted larger incorporated towns and cities from their requirements, leaving them with a considerable amount of freedom of both time and action. Although some measure of independence in the making of the curriculum was thus left to these places, the rise of another movement standardized even them. This was the requirement that high-school graduates should have satisfied certain prescribed requirements before entering college. With the swift development of academies and high schools in the first half of the nineteenth century, colleges developed the habit of requiring candidates for admission to pass examinations, even going so far as to set up College Board Associations in the latter years of the period under discussion.

Until nearly 1880 this process was very greatly complicated by the enormous diversity in subjects offered in the local secondary school. We have already noted that more than a hundred different titles made up the curriculum offerings, even in a given state or region. The college administrators felt insistently the need for control over the "local option" which permitted such a situation, since it left each state and chartered city free to make its own course of study and to set its own graduation requirements. College presidents, headmasters of private schools, and even a considerable body of high-school principals wanted to reduce the resulting "chaotic condition" of the secondary school to order by standardizing the high-school curriculum on the basis of preparation for higher institutions. And they had their way. For thirty years college presidents and preparatory-school people took charge, determining the form and spirit of the materials of instruction throughout the entire range of the high school.

Even before 1880 the entrance requirements of individual colleges -- Harvard, Yale, and other New England institutions especially - played an important role in determining the content, sequence, and arrangement of high-school courses. English, for example, prescription became more and more rigid. and the accumulating control of "the masterpieces of English literature" can be seen in the successive entrance requirements from 1865 to 1874. In such a liberal institution as Harvard was even then, the catalogues made more rigid each year the stipulation that the subjects for English composition should be "taken from such works of standard authors as shall be announced from time to time. The subject for 1874 will be taken from one of the following works: Shakespeare's Tempest, Julius Caesar, The Merchant of Venice, Goldsmith's Vicar of Wakefield, Scott's Ivanhoe and The Lay of the Last Minstrel." By 1890 the list of "certain masterpieces of English literature" having steadily been augmented, examinations were always to be set from this list.

Against the rigidity and wastefulness of so much imposed system some vigorous protests were heard, even within the college field itself. In an address before the National Education Association in 1888 Charles W. Eliot, then president of Harvard,

advocated many administrative reforms, especially flexibility in promotion and in organization of instruction. To secure these he urged colleges to permit more latitude in entrance requirements. Eliot not only advocated reforms; he also practiced them. He led the way during four decades by developing a liberal spirit and practice in Harvard University. After 1872, under his leadership, Harvard slowly opened the gates to reform in entrance requirements by permitting greater variety in the lists of Latin, Greek, and English composition on which examinations should be based.

Most administrators of universities and preparatory schools, however, feared the nonuniformity that still prevailed. They wanted continuity in the educational system. Smooth mobility of the scholastic population was their desideratum of efficient school administration — such as would allow a graduate of Phillips Andover or Newark Academy, for example, to enter Harvard, Princeton, Yale, Michigan, or Colorado with equal facility. Their minds were focused on flexibility of school administration, not on growth and learning.

So it was that the textbook, the "regents," the "college boards," and other formal agencies had their way with the curriculum. And so it was that the conception became ingrained in Americans that

Education and schooling are synonymous.

Education is something you do before you "enter life"; it is preparation for life — a getting-ready, not a doing-now.

Education is something you do with words and abstract symbols.

The curriculum is a given body of knowledge and skill.

CHAPTER VIII : THE CURRICULUM OF THE GRADED SCHOOL: CRITICAL APPRAISAL

A BARE historical outline of the way in which schools were set up and their program of work came to be a curriculum of verbal "subjects" is now before us. Before considering the half-century of attempts by educational leaders to undo the evils of this "subject-curriculum," let us make a preliminary appraisal of the program itself. Let us seek answers to such questions as the following:

Viewed in the large, what did the graded-school program look like? What were its chief characteristics?

To what extent did it contribute to the all-round education of children and youth?

Did it build up in them an understanding of the modern world about them; that is, did it confront them with their own personal problems and with the modes of living, problems, and issues of community and national life?

Did it build up a sensitive appreciation of the fine and the beautiful in their surroundings?

Did it develop their powers of creative expression?

Did it practice them in the skills and techniques which they needed in their everyday life?

To answer these questions tentatively let us consider three phases of this curriculum: first its devotion to skill and technique; second its memorization of facts in the so-called "content" subjects; and third its dearth of creativeness, especially in the arts.

I. The Curriculum and the Mastery of Academic Skills

For a hundred years the efforts of American schoolmasters were devoted primarily to the perfection of skill. Up to the second quarter of the nineteenth century practically all the time of the younger children was devoted to the techniques of reading. writing, and arithmetic. In the years of the 1830's and 1840's, when geography, history, and other subjects were injected into the program, the time allotted to the three R's was reduced a little; but even at the middle of the century the vast preponderance of time was still devoted to these basic skills. In the next half-century somewhat more practical subjects made their way into the program, and these also reduced the allotment of time to the three R's. But even then more than half of the educational career of an elementary-school child was devoted to these socalled "fundamentals." From 1775 to 1900, in spite of the addition of all the new subjects and studies, the three R's held their sway. Let us document this statement a bit.

Learning to read consisted of learning one's letters and of learning to recognize and pronounce words upon seeing their printed symbols. In this "word-calling" process the mechanics of reading were emphasized at the expense of reading for understanding; not until 1850 was there any devotion to interpretation of meaning. It is safe to estimate that throughout this earlier period the art of mechanically perfect pronunciation consumed not less than a fourth of the time and energy of the primary school and not less than a sixth of the time of the intermediate grades.

Writing also was regarded as a disciplinary, analytic process. Writing was analyzed into its elements — the words into their letters and the letters into stems and ovals. Attainment of skill in writing consisted of practicing stems and ovals until one could fill sheets of paper with mechanically measured and perfectly spaced stems and with ovals of the same uniform alignment and shape. For decades efficiency in writing was developed by hours of "push and pull," "upper turn, main slant, lower turn," and

oval-making. This was "penmanship," a far cry indeed from the practice of having children learn to write by writing things of social meaning — personal letters, notes, directions, reports, and the like.

Precisely the same procedure characterized the other work of the language arts. Grammar consisted of "analysis" and "parsing." The disciplinary conception of education showed itself in the implied assumption that if children knew the rules of correct speech they would speak correctly. Instead of being surrounded with an atmosphere of correct speech and being permitted to talk much and write much about many things, they were taught the "parts of speech." They learned to recognize these parts, and they mastered their intricacies of form; they studied day in and day out how number and tense should agree, and how the various ways of writing should measure up to standard forms. But most of their normal speech was untaught and uncriticized.

Similarly arithmetic consisted almost altogether of the perfection of skill in adding, subtracting, multiplying, and dividing integers and fractions. In the course of the elementary-school grades every child devoted hundreds of hours of time to learning these arithmetical operations. Practice was given in the manipulation of elaborate and complicated sets of numbers and fractions that no child would ever encounter after leaving the arithmetic class. Repetition was the method; abstract technical skill, the aim.

On the side of problem-solving there was the same emphasis upon mechanics rather than upon interpretation and understanding. It was implicitly assumed that skill in the use of numerical techniques could be abstracted from "life situations" and developed apart. Arithmetical "problems" were merely word descriptions of number situations, not actual social situations in which a child would naturally use numbers. Furthermore, the problems, as they appeared in arithmetic books, were outlandish and unreal. Trained in the doing of these isolated, unreal word-problems, by some mysterious process the pupils were to be able later in life to transfer their skill to actual situations requiring arithmetical techniques.

Thus we see that education was conceived of as something you do with symbols and with words. Inevitably the preponderance of time and energy in the elementary schools was devoted to the perfecting of academic skills.

SKILLS IN THE SECONDARY SCHOOL

Similarly in the high school most of the time was devoted to the mastery of skill by the repetition of specific processes. Note that more than half of the entire curriculum was devoted to mathematics and linguistics. In algebra more than three quarters of the time was devoted to the memorizing of the steps by which terms are collected, fractions cleared, and the elements of an equation transposed. In geometry, instead of practicing the art of logic, youth memorized the steps by which theorems and propositions were demonstrated. Here, again, was the disciplinary conception of education in the belief that skill in handling the elements of problems would transfer to the use of these elements in actual concrete problem situations. Not until the latter part of the nineteenth century did schoolmasters recognize and state a different aim for mathematics-teaching namely, the training of youth to recognize, express, and measure scientific law and to describe relationships between variables that change together.

In the language work of the high schools the same formalism was revealed. Instead of practicing the children in speech, practically all their time was devoted to parsing and declining, to memorizing the grammatical forms, and to preparing spotless manuscripts, mechanically spaced, grammatically correct, punctuated according to the best standard usage.

We need not multiply illustrations further to make our point that both elementary and secondary curriculums throughout the first hundred years of our graded schools were devoted primarily to intellectual and motor skills. They reflected the unsound disciplinary conception of education which had held sway over the scholastics for a thousand years.

The schoolmen came to conceive of the production of educated

adults in much the same way that a manufacturer conceives of the production of steel rails. In each case the process is one of breaking up the product into its parts, of standardizing the development of each part, and assembling the completed product from the parts. If the schoolmasters ever asked how the parts got put together in the educated adults, they must have assumed that the children put them together for themselves as they grew up.

The criticism which we are thus leveling at the makers of the school program is not to be interpreted as meaning that techniques are not needed or that the school should not perfect them. Techniques are essential, and they must be perfected in the school. Nevertheless a fourfold criticism of the school remains: first that mastery of skill was permitted to dominate the whole curriculum; second that much of the technique developed had no social utility at all; third that the skills were improperly, wastefully, and inefficiently taught; fourth that skill was conceived of as primarily intellectual and motor and that many of the more socially useful techniques were therefore ignored altogether.

II. Learning in the "Content" Subjects: the Reign of Mental Discipline

1. GEOGRAPHY, HISTORY, AND CIVICS

We have already seen that between 1820 and 1860 the academic subjects of geography, history, and civics became firmly entrenched in the school program. In many states geography and history were required by law, and the demand for materials had become so great that three hundred and sixty different histories, a dozen civics textbooks, and ten geographies had been published by 1860.

School reports show that these early "social studies" were highly valued. Horace Mann's annual report for 1841-1842 shows that 10,177 pupils were studying United States history, and 2571 general history. The enrollment for the other subjects was as follows:

	ordinal portion in the second				1.0	
Algebra		2333	Physiology			. 16
Bookkeeping		. 1472	Logic			. 330
Latin		. 858	Surveying .			. 249
Rhetoric		. 601	Greek			. 183
Geometry		. 463				

THE CRADED-SCHOOL PROCRAM ADDRAISED

The report of the Regents of the University of the State of New York for 1860 shows that 164 New York academies offered United States history and 121 offered general history. There were 177 different United States histories in use in the state, 163 general histories, 75 textbooks on Roman antiquities, 65 on Greek antiquities, and 45 on the Constitution, government, and law.

What was the content of these courses? What kind of curriculum did the disciplinary, perfection-of-skill conception of education produce in these so-called "content" subjects?

For example, what ideas did young people get from geography? From Jedediah Morse's Geography Made Easy (1784) they got such things as

The Figures, Motions, Distances and Magnitudes of the heavenly Bodies:—A general description of the Earth considered as a Planet: with its grand Divisions into Land and Water, Continents, Oceans, Islands, etc.—The Situation, Boundaries and Extent of the several Empires, Kingdoms, and States, together with an account of their Climate, Soil, Productions and Commerce:—The Number, Genius and general Character of the Inhabitants:—Their Religion, Government and History:—Calculated particularly for the Use and Improvements of Schools in the United States.

About the middle of the nineteenth century improvements were made in geography instruction, especially under the leader-ship of Arnold Guyot, who came to Massachusetts in 1848 from Switzerland. Through his School Geography he introduced many of the ideas of his European teachers, Pestalozzi and Ritter. For example, he vitalized the memorizing of descriptions of geographic conditions by taking children on trips in their local communities. Map study too was based upon similar firsthand observation.

The influence of another foreign educator, Friedrich Herbart, was felt in the development of history as a subject in the cur-

riculum. Those of his students who came to America laid great emphasis upon the development of moral ideals in young people and upon their preparation for social usefulness. Herbart, however, like most of the leaders of his time, believed that the study of subjects would develop qualities. He chose history and literature, especially the general history of the world and the literature of the Greeks, for his purposes.

But the history texts of the century, as might be expected, reflected the prevalent disciplinary ideas. Their content was encyclopedic and consisted of the militaristic developments of Old World history, supplemented by a little of the American chronicle. Political history was dominated by the recital of names of rulers and other officials, dates of battles, legislative enactments, and constitutional provisions. Industrial history was never mentioned, nor were the economic and social problems that were taking shape on the frontier and in the towns.

The civics books which came into the curriculum before 1860 came largely in response to a demand that children understand government. The prevailing conception was, however, that an understanding of government would come from the memorization and dissection of the American Constitution. At the conclusion of the Civil War, as is customary after every war in every country, the demand shifted, in both history and civics, to a more conscious teaching of patriotism. In the hysteria of the reconstruction era many states passed laws requiring a study of the Constitution of the United States and of the pupils' state constitutions. Gradually, under the impetus of Hinsdale and others, this dissecting, memorizing study of constitutions was transformed into a study of municipal, state, and national governments. The emphasis, however, was still upon the machinery, upon the form of government, not upon the problems and issues which faced the American people or upon the actual functioning of government.

Our account of the development of the "social" studies before 1890 provides another illustration of the degree to which the curriculum-makers were under the sway of mental discipline and the perfection of skill. Their descriptions of community and national life were devoted almost altogether to naming various forms of government and government officials and to learning the rights and duties of departments and officials. There was little or no attention given to the way the government actually worked, nor even to its formal mechanical performance. Indeed, even at the present day few textbooks or courses describe concretely the invisible forces which really control our political life. The curriculum-makers wanted youth to understand the American tradition, ideals, and method of government, but they thought that memorization of the structure of political government would bring about the desired understanding and participation. Throughout the century of curriculum-construction, then, there was little thought of student self-government. Mastery of word descriptions, not active social life! Still the disciplinary conception!

It is not an exaggeration to say that learning, even in the social studies, was of the same memoriter nature as in the so-called skills. Children learned map locations by repetitiously placing location facts on blank maps. They learned the chronology of American civilization by memorizing verbatim the connection between a political event and the year in which it happened. There was no rich experiential contact with the location of cities, regions, lines of trade, markets, crucial deposits of fuel, and the like. Nor was there even an introduction to social trends and movements.

2. THE SCIENCE SUBJECTS

We have seen that curriculum-making has always consisted merely of adding new subjects in response to the demands of changing times. A host of new subjects entered the curriculum in the 1870's and 1880's. All sorts of interests, mostly practical, clamored for a place and slowly but surely pushed their way in — manual arts, homemaking studies, social studies, vocational studies, nature study, what not.

But strongest of them all were the sciences. Under the dominance of the scientific philosophy of the middle nineteenth century, "science" came to occupy a very strongly entrenched position in the school curriculum. Even before this time various

sciences had been included in programs of studies. Botany and chemistry were given in the Boston High School for Girls in 1826. Natural history appeared seven years later. The Northampton High School gave courses in geology and mineralogy in 1837. Edgartown added anatomy to its course in the same year. Physiology and agricultural chemistry made their appearance in the Ipswich curriculum in 1839 and 1845 respectively. Massachusetts high schools were required by law in 1857 to teach chemistry and botany; astronomy and zoology were required in towns of 4000 inhabitants and over as early as 1841. By 1841 natural philosophy too was offered in more than half the high schools in the state, and it became a required subject in 1857. These dates (all for Massachusetts schools) illustrate typically the interval during which the new sciences entered the schools.

Science, therefore, at the middle of the century, found itself in a strategic position in the curriculum — a position of leadership which it held until well into the 1890's. Practically every student "took" one or more of the sciences. Prior to 1890 physiology and physical geography, chemistry and botany, had made a place for themselves in the senior high school. Natural history, as a titled subject, disappeared, and geology and astronomy declined in importance, their places being taken by the new zoology and physics. The latter was offered in practically all the high schools in 1890.

Did all this effort devoted to the study of science contribute to a dynamic understanding of one's physical environment, of how people live? Certainly in no direct way. Physics and chemistry never gave a real understanding of the bases of mechanical civilization, nor did physical geography teach how people live together. "Understanding," in the larger sense of the term, has never been the outcome of the study of science.

Religious and disciplinary aims still held the academic imagination. The textbooks, which aimed at the retention of the religious note, were prefaced by statements like the following:

"Consider the lilies of the field, how they grow; they toil not, neither do they spin: and yet I say unto you that Solomon in all his glory was not arrayed like one of these" (Matt. vi, 28-29). Our

Lord's direct purpose in his lesson of the lilies was to direct the people's attention to God's care of them.¹

Throughout these books there are frequent references to the Divine Insight, which creates plants and animals, rocks and human beings.

Textbooks sponsoring the disciplinary aim phrased their credo as one that would "discipline the senses to habits of quick and accurate observation, and the mind to the habit of forming correct judgments from the facts which the senses reveal." Zoology abounded in technical terms and classifications of animals. Concise descriptions of animal life and dry enumeration of physical characteristics took the place of vivid accounts of their habits of life. Botanies dealt with the anatomical structure of plant life. The aim seemed to be an encyclopedic grasp of the physical constitution of animals and plants. Knowledge of anatomical structure was preferred to comprehension of the functioning of life. Textbooks were compilations of technical terms and of minute texts of classification. The point of view of textbook construction is admirably illustrated in the statement that the "most important discovery made since this book was first published is that the two lowest mammals, that is the duck-bill and the echidna, both lay eggs."

Physical geography, like botany and zoology, was an encyclopedic compendium of the features of the earth, rivers, oceans, plains, mountains, valleys. Ethnological materials consisted of the classification of races and descriptions of anatomical structures and other physical features. Enough has been said, therefore, to illustrate vividly the prevalence of science in the curriculum and the memoriter nature of science subjects.

3. THE NEW "PRACTICAL" SUBJECTS

In about 1880, near the end of the formative period of American life, other new subjects found a meager place in the school curriculum, especially in the upper elementary school and the

¹ Asa Gray, How Plants Grow, 1858.

high school. Courses in manual training, household arts, commercial work, vocational training, and agriculture were incorporated into hundreds of school programs before 1900.

The introduction of courses in manual training was greatly increased by a display at the Centennial Exposition in Philadelphia in 1876 in which products of handwork courses in Europe were shown. Within fifteen years after this exposition, courses for boys in woodworking, metalworking, and the like were introduced into practically all the large cities and towns in the United States. By 1895 Massachusetts required all cities of 30,000 inhabitants or more to offer manual training in high schools.

The disciplinary conception ruled education here, however, as well as in the literary subjects. Instead of putting boys at practical jobs, letting them learn by serving as apprentice carpenters, cabinetmakers, plumbers, machinists, and the like, artificial school shops were built, the elements of skill were analyzed. and graded sets of exercises were built up for them to do. In woodworking, for example, boys were taught to make joints, to plane a surface smooth, to rule and saw boards. Mechanical drawing was the same. Youth were taught to use a drawing board, T square, ruling pen; to make various types of working drawings; to place "vanishing points," to locate "the horizon." Here and there in more practical courses they learned to read blueprints and to make them. Finally, if they were lucky, they were permitted, at the very end of the course, to make a chair, table, desk, necktie rack, footstool, or some other such household appurtenance.

The teaching was done by pedagogues with book knowledge about the trades, not by skilled craftsmen themselves. Hence it was an analytic, intellectual process; the "practical exercise" took the place of the real job. This, then, was manual training in the late 1890's and the early part of the twentieth century.

In the same years hundreds of cooking and sewing courses were introduced into the curriculum. By 1920 there were two hundred and sixty-seven different textbooks in the field. (Very few of these, however, were in actual use. Nine books on foods and ten on

clothing supplied 95 per cent of the demand of the public schools.) Teaching emphasis was upon information and technique rather than upon powers of thinking and judgment or upon worth-while homemaking skills. Both the thoughts of the children and the energies of their teachers were alike expended on those details to which textbooks paid attention, and textbooks paid attention to information which was of little social value. Instead of buying, budgeting, designing, solving domestic problems and forming domestic habits, pupils were put to learning facts. In textile courses, for example, more than two thirds of their attention was devoted to information-getting. Production of fibers, manufacture of materials, the historical development of industries these were the topics that engrossed the pupils. In cooking classes they conceivably could and sometimes did trace the historical development of stoves, describing them in detail from the earliest to the most modern types.

No one expected or intended that instruction would result in abilities of appreciation and enjoyment; the aim was perfection in ability to cook and sew, in "recipes and stitches." There was no discussion of the psychology of home and family life, although the latter was changing rapidly after 1890. There was little reference to economic problems. The family budget was discussed in only three of the textbooks on clothing used during the 1910's, and in these this topic received, respectively, only 1.3, 1.1, and 6.5 per cent of the entire space. Likewise only three of the books on foods referred to the keeping of household budgets, and these devoted, respectively, 3.8, 0.46, and 0.75 per cent of their space to the subject. Marketing received the same negligent treatment, from 0.7 to 7.89 per cent of the space in the books. Thus courses in domestic science and household arts, like those in manual training, were analytic and intellectual. Although full of socalled "practical exercises," they were really examples of the disciplinary theory.

The commercial subjects of bookkeeping, typewriting, stenography, business English, commercial geography, accounting, and the like also made their appearance after 1890. Although the rudiments of accounting and bookkeeping had been included in

the curriculum of the early academies, they had thereafter come to occupy an insignificant role, owing to the growing dominance of entrance requirements for college. From the Civil War until about 1890 little or no attention was given to them. Then, under the leadership of university presidents and of the American Bankers Association and other organized business groups, a concerted movement developed to use the high schools in preparing youth for business. Shortly after 1900, moreover, the colleges and universities developed commercial departments, schools of business, and economics departments. Many of them, as we have seen, lessened their requirements for entrance. Under the sway of these influences it was easy to introduce commercial subjects into the high school as preparation for business and for advanced college instruction.

Unfortunately, however, these subjects, like the others, consisted almost altogether of technique and mastery of routine. Witness the development of skill in stenography, typewriting, bookkeeping, business English, commercial geography. Throughout it all practically no attention was given to the development of a critical study of business life in America and its place in the rapidly changing economic system. Thus mental discipline, mastery of mechanical skill, dominated this field as it did the others.

III. The Dearth of Creative Expression and Appreciation

The gap between aesthetic life and the school curriculum was the same as that between economic and political life and the curriculum. The program of education designed by nineteenthcentury schoolmasters did not include original writing, creative painting, music, dancing, dramatics, or craftsmanship of any kind.

For that matter, these arts were hardly present in American life itself. For nearly three centuries the artist and the craftsman had been submerged, while the promoter, the builder, the maker of things, set the standard of life. Perhaps it is not startling,

therefore, to find that neither the content of the curriculum nor its stated aims recognized the role of either creative expression or appreciation.

What are the mediums of expression through which human beings work as artists? The range is, of course, infinite: the oral and written word in essay, poem, story; tone, rhythm, and harmony in music; the body in the dance; line, light and shade, and modeling in painting, drawing, sculpture; the theater, which integrates all these; and many others. As a result of the creative movement of the past quarter-century, we know now that education can utilize all these channels of expression.

But in the formative century of American education the only route to "culture" was regarded essentially as that of words. One would therefore expect to find the highest art development of the curriculum in its literary phases. This means in the subject of "English." Let us see to what extent English developed literary appreciation and expression.

I. THE CURRICULUM IN "ENGLISH"

From the close of the Civil War to the present time there has probably been no greater achievement in the development of school curriculums than that revealed in the larger emphasis upon the vernacular. It must not be thought, however, that this growing emphasis meant a reduction of time devoted to other subjects. So rapidly did the movement spread that, by 1900, English had entrenched itself as the most important unit in the secondary course of study. Two thirds of our high schools offered courses in "rhetoric"; more than half, courses in composition and grammar; about two thirds, courses in "English literature"; and about one third gave a course called merely "literature." Between 1885 and 1900, furthermore, English became of such recognized importance that systematic "year" courses were organized. In 1900 nearly half the high schools of America offered a course called "First-Year English"; 35 per cent, "Second-Year English"; 27 per cent, "Third-Year English"; and 15 per cent, "Fourth-Year English."

In this book-knowledge era of curriculum-making, did the "English" curriculum of the schools train in literary judgment? Did it create the habit of enjoyment of fine writing? Did it develop the tendency toward creative self-expression? It did not. The content of the culture curriculum lagged two and three generations behind the content of American life, and the method of its presentation and the atmosphere of the classroom totally negatived the possibility of producing the desired understanding of American culture or the ability to contribute to its development.

"English" for half a century was a formal, pedantic thing. It was dominated by grammar, English analysis, word analysis, rhetoric, composition, parsing, the memorizing of definitions, the learning of rules for developing skill with oral mechanics.

In 1862 Welch said in the preface of his textbook, "The systematic analysis of the English sentence should hold a prominent rank merely as a means of mental development." There we have it! The analysis of the English sentence dominated a curriculum which should have been devoted primarily to an understanding of the poetry of the American rhythm. Instead of letting children read and feel deeply, and through literature develop an understanding and appreciation of American life, Welch and Greene in the 1860's, Clark and Swinton in the 1870's, Reed and Kellogg in the 1880's and 1890's, and their colleagues in every decade, drilled children in the mastery of syntax and in the critical study of figures of speech, etymological analysis, explanation of mechanical forms, spelling, paraphrasing, language structure. By their very emphasis upon dissection they effectually prevented true understanding of the reading materials.

The criticisms which have been made about grammar can be duplicated for rhetoric and composition. Rhetoric was closely tied up with logic. Chapter titles and classroom discussion dealt with argument, persuasion, perspicuity, elegance, and eloquence. Children were asked to write "in good form" when they had little or nothing in their heads to write about. During the entire half-century there was little or no recognition of the fact that creative self-expression develops only when the writer has something in mind to say.

As for "literature," from our pioneering days we rarely produced or used American writings for our schools. The reading books commonly used in the 1850's and 1860's were compendiums of short selections culled from classical writers. mostly British. Even the high schools depended for their content very largely upon such books. In their form and emphasis they defeated the purpose of their inclusion in the curriculum. Their emphasis was upon the mechanics of reading, not upon ideas and feeling. In McGuffey's texts, which are typical of those in popular use at the time, a large amount of material is devoted to accent, emphasis, voice inflection, articulation, and gesture. Rules and definitions to control oral reading and speaking pervaded both the books and the exercises. Elaborate rules were developed for controlling the pitch of the voice. Pages were given to describing how to use the hands and face in making gestures. Thus, in the English curriculum of Civil War and reconstruction days, mechanics held sway over meaning and emotion.

By 1885 the high school had come under the dominance of higher education, and the English curriculum, as well as that of mathematics, of Latin, of the modern languages, and of the sciences, came to be determined by requirements for college entrance. The eyes of the academicians were focused upon literary masterpieces (particularly those emanating from Great Britain), not upon American youth striving to understand American life. Less than one in six of our high schools offered a course in American literature. Contemporary American writers were almost never represented in the reading lists of our people. A contempt for the contemporary itself was prevalent in the selections of reading material through which young America was to be given its understanding and emotional view of life. Silas Marner, the Iliad, the Odyssey, The Vicar of Wakefield, The Lady of the Lake ("sitting comfortably in the high-school curriculum for seventyfive years"), usurped the place which should have been devoted to the creation of an insight into the stirring movements in the new industrial America. The point cannot be made too emphatically that the academicians of our colleges and schools ignored the materials of American self-expression.

The school curriculum in the literary field was under the sway also of a robust faith in mental discipline. The current point of view was that learning, to be effective, must be hard and disagreeable. The faculties of the mind, the powers of logical analysis and critical judgment, were to be trained by the observation, collection, and systematization of facts. And this could be done equally well in preparation for life activities by the *Idylls of the King*, chemical analyses, quadratic equations, geometrical demonstration, or Latin declensions!

2. THE CURRICULUM IN THE OTHER ARTS

What about other forms of expression? Music appeared in the announced courses of study about 1875. Nearly fifty years before, Lowell Mason and his associates, in the 1830's, had carried on prolonged agitation to have singing incorporated in the work of the public elementary schools. Mason was partly successful. and in a few progressive cities auditorium and assembly singing in the high school and formal class singing in the elementary school had gradually become part of the curriculum. So slowly did music catch the imagination of the school leaders and public. however, that even in the 1860's courses of study in most of the schools of the larger communities made almost no reference to it. In the 1870's, however, we find music incorporated in the courses of a number of schools, and from that time on it was assigned a regularly allotted time in the elementary school. Throughout the century it consisted of little more than unison singing in grade classes, exercises in sight-reading, intellectual exercises in learning the staff, and other facts about musical notation.

Thus neither was music taken seriously, nor was it well taught. Even at the close of our formative period it was allotted only twenty or thirty minutes a week and was confined to one limited form of expression, namely, group singing. Children were practiced in the mechanical skill of sight-reading. They were taught how to recognize the elements of musical notation. Because teachers and principals were so ignorant of music, the teaching of it was assigned to a special "music teacher" or a "supervisor of

music" who developed systematic, formal schemes of musical instruction, which were incorporated into graded systems of music books and were adopted all over the United States. As Surette said, "Public school music in the United States... has been made to order for school books and to fit technical problems...it consequently fails to keep allegiance with children."

But in American life itself there was no national music until well on into the twentieth century, so that the dearth of music in the school merely paralleled that in society. Not until the beginning of the twentieth century was there any opportunity for youth to participate in instrumental music, pageantry involving music and the dance, and the like. Apparently the idea never occurred to students of education in those years that children could make their own instruments and learn to play upon them. The criticisms which have been made of the rest of the curriculum can be repeated and made even more emphatically for music.

Neither was there any provision for the dance in the program of the schools. Although rhythm is now recognized as one of the fundamental characteristics of all life activities, — indeed, of individuality itself, — its use in the education of the body, as in the education of the whole personality, was ignored. If the educators of the nineteenth century had really known the Greeks that they quoted so frequently, they no doubt would have made rhythm and bodily education a much more important foundation-stone of the career of the school child. But instead of holding with Plato that "man is by nature rhythmical," and hence that education must be fundamentally "music and gymnastics," they followed the disciplinary verbalizers of medieval Europe.

Moreover, the courses of study before 1875 revealed almost no references to the graphic and plastic arts. Although a few of the courses which appeared in the 1880's and 1890's did mention "drawing," we must remember that this was mechanical drawing, the handmaiden of manual training. About the end of the century "freehand drawing" made its way hesitatingly into the program of studies and was grudgingly given a place, but it was not taken seriously. Art was not something experienced in everyday life. Hence it was relegated to a special compartment in the course of

study; and because it was so mysterious an enterprise, it had to be taught by special teachers and by that acme of administrative formalism, the school supervisor.

So when, after 1890, the larger city schools began to give a place to drawing, supervisors organized it as a "subject." They made manuals, copybooks, outlines, and syllabi. Naturally they emphasized the mechanical and commercial aspects of drawing. Commercial "drawing books" were an immediate success, and hundreds of thousands of children painstakingly reproduced the plants, animals, and other commonplace objects printed on the pages of their copybooks. Not until the twentieth century was drawing from life introduced, but even this innovation led to little more than the attempt to reproduce the object itself. What the child might feel, what he might see as a result of the "subject" he was required to draw, never entered the minds of these formalists in the arts.

Copying and learning the rules of perspective were the highest points reached in the art development of this period. Thus the disciplinary era in the arts paralleled that in the social part of the program. Technique was mastered at the expense of aesthetic appreciation and the joy of living.

IV. The Lag of the School behind the Changing Content of American Life

One fact has come out again and again in our study, and that is the vast chasm between the vital problems of American culture and the content of the American school curriculum. Not once throughout the initial building era of American education was the curriculum of the schools constructed from the moving trends of the civilization surrounding the children. We have illustrated this in a threefold division of the school program — that is, in the techniques needed in everyday life, in the social and natural sciences, and in the expressive and appreciative arts. From Franklin's Academy to the modern school of the post-World-War decade the gap has persisted. It still persists.

WHAT ARE THE REASONS FOR THIS LAG OF THE SCHOOL?

Why is it that curriculum-makers have not succeeded in spanning the gap between society and the school? There are several reasons why the curriculum has been static in the midst of a febrile world, the tempo and rhythm of which have been far more dynamic than those of any preceding age.

First, the Creative Mind Has Lagged behind the Exploitive

Perhaps the most far-reaching cause has been the tendency of the American mind to divorce education from practical life. The preceding pages have developed the thesis that American life has moved in two quite separate streams: one, the practical, economic stream; the other, the academic, intellectualistic, disciplinary stream of education and the public school. Dominated constantly by the fear of economic insecurity and the hope of economic success, the typical American has been driven by an unceasing energy. Throughout our national history he has been a doer, a maker, an exploiter, an accumulator of things and dollars, a hard, metallic man in whom meditation and reflection rarely had an opportunity to develop. Life on this continent has been governed primarily by the quest for food; the "life within the brain" has played little part in the American mind.

Having its beginnings in the aura of religion and often financially supported by religious agencies, education became a thing apart from the "catchpenny current of business." As the religious aim gave way to the gospel of social efficiency, the curriculum more closely bridged the span that existed between it and American life; but the American people still wanted their schools and their churches to give voice to a spiritual idealism for which they vaguely sensed a need but which they had lost or never had.

Second, the Influence of the Textbook Writers and Publishers

The second cause of the lag of the curriculum is found in the academic orientation of the textbook-writers. From the days of

the early grading of schools in the 1830's until the close of the century, the selection of the detailed content and the arrangement of the materials of our school courses were left almost altogether to the individual judgment of authors. Until the work of the Committee of Ten (1893) there was little or no co-operation among the teachers and specialists in committees or other organized groups for the discussion of curriculum content.

But from the days of Noah Webster and McGuffey to the regime of George Wentworth, schoolbooks were made by two groups of writers. One group was made up of lav citizens and professional textbook-writers like the foregoing. The other was composed of professors of the various school subjects. Hence the curriculum came to consist of a program of narrow school subjects, for each of which a specific textbook determined the content of instruction. Gradually the curriculum became oriented about the research materials which the professors were developing in their laboratories and libraries, not about the conditions of youth and adults in American society. Furthermore, the professors, because of their prolonged intellectual training and grounding in cautious research methods, their prudence in generalization from their data, tended to concentrate their attention upon the past and upon those materials which, because of prolonged use, had come to have scientific prestige. Having a fear of unsound generalization, hence a fear of the contemporary in history, the new, the unauthenticated in science, they more and more neglected the vital affairs of current life.

Moreover, we must remember that the publication of most of the materials used in the schools is a private affair, carried on essentially to make money. The history of the curriculum of American schools shows very clearly that the general tendency of publishers and authors is to give the schools what they want. It is not to teach them what they should have! There have been conspicuous exceptions to this generalization in the case of certain companies of dignity and a fine social sense. Some have, from time to time, actually risked money and prestige on epochmarking innovations in curriculum content. But they are indeed the great exception to the general rule. Twenty years of intimate

contact with the forces that contribute to curriculum-construction have convinced me that most authors and publishers tend to maintain the *status quo*.

Other Factors

Numerous other factors contribute to this lag. There is, for example, the inadequacy and ill training of teachers. In the hands of insufficient numbers of teachers whose opportunities for training have always been curiously limited, the school curriculum is a stale and predigested thing, an accretion of secondhand information which becomes thirdhand in the teaching of it. As long as the curriculum is "subject-matter-set-out-to-be-learned," first by the teacher and then by the child, so long will the gap remain between it and the truly educative effect of actual life.

Moreover, as long as education is thought of as something that goes on only within "the school," the curriculum will be out of date. The school, so conceived, serves as a catchall for the special pleadings of particular groups in the larger society; and, without a dynamic, problem-solving program of its own, it thus acts as a repository and backwash of dead issues. The strength of the classics is perhaps the paramount example of this fact, or the liquor-evil hysteria of hygiene texts, or the chauvinism of much history-teaching, or the reactionary capitalistic dogmas of economics courses. The school curriculum, in short, has lagged behind the social life from which it arises because its creation and continuance have been brought about by small special groups.

There is one other reason for the lag, which is unavoidable and inevitable, namely, the time element. We have examined the social heritage in some detail, and it must readily have become apparent that the school curriculum, by its very nature and source, cannot be as creative and dynamic as those outside forces which make the social heritage. What gets into the school curriculum must already have been present in the world outside. Although a slight gap may therefore long persist, it will continue to shorten insofar as the curriculums of America's schools become the conscious concern of all of America's citizenry.



Part IV

EDUCATIONAL REFORM: REARRANGEMENT, NOT RECONSTRUCTION

THE general structure of the graded school was barely erected when progressive superintendents of schools began to find fault with it. Their criticisms started even before 1870 and augmented in volume as the years passed until, by 1900, there was widespread agitation to break up the rigid "Procrustean bed of grades," as Superintendent Harris of St. Louis called it.

To understand the strenuous efforts that administrators made to undo the evils of the mass-production, class-instruction school system, we must visualize the conditions confronting them. We shall then understand the central problem today; for, although sixty years have passed, the conditions of mass education today are basically very much the same as they were then.

CHAPTER IX · ADMINISTRATIVE TINKERING WITH THE

SUBJECT-CURRICULUM

I. The Conditions Confronting the Administrators

SUCCINCTLY PUT, these conditions were, and are today essentially, as follows:

r. Mass production in education. Large and growing classes — thirty, forty, even fifty or more children to be taught by one teacher.

2. Unwillingness on the part of most communities to finance enough teachers to keep the size of the classes small. By and large, throughout the history of the American graded school, there should have been at least twice as many room teachers as there were.

3. Children classified primarily in terms of chronological ages, and promoted once a year from grade to grade.

4. A vast range of individual differences in ability to learn among the children of any one grade-class; for example, pupils classified in a third-grade class, some of whom can read comprehendingly at the rate of 350 words a minute, others of whom can read at a rate of not more than 20 words a minute. The opponents of the system denounced it scathingly: the long and the short, the brilliant and the stupid, the leaders and the followers, the innovators and the conformists — all in one group, they said, all expected to study the same facts, learn the same skills, behave the same way!

5. The curriculum conceived of as a given body of facts and skills to be absorbed equally well by all. Learning conceived of as an ability to give back on the teacher's demand the words which symbolize these facts and skills.

6. The school system of each community, of each state, and hence of the nation becoming year after year a huge and increasingly complicated machine of elementary schools, high schools, colleges, universities, professional and technical schools.

- 7. The administrators therefore confronted with the task of providing for the movement of young people through grades, schools, buildings, communities, and states, which constitute the physical background of the system.
- 8. The school system regarded as a "ladder of equal educational opportunity" each child to be provided with the means of passing from grade to grade, from school to school, from system to system, easily and efficiently, without injustice to the pupil and with maintenance of the "standards" of the schools.
- 9. A large and growing movement of the general population from village to town, from city to city, and from state to state. For more than half a century this fact of mobility of population has impressed itself more deeply upon the minds of school administrators than any other single fact. They saw one outstanding need—namely, flexibility of movement of children from one part of the nation's school system to another. Nothing is more important to understand about the physical conditions of education and the attitudes of educators than that. It helps more than any one factor to account for their chief interest—the rearrangement of the administrative structure of the school system.

These, then, were the conditions and points of view which have constituted the changing social and educational scene from the latter decades of the nineteenth century to the present time.

How Administrators Conceived of the Curriculum and Learning

But the essential problem for us is to note the conception of the curriculum and of learning held by the school administrators. The curriculum was conceived of as a definite body of knowledge and skills, organized in the form of subjects of study. The protagonists of this view pointed out that the men of the modern world had discovered this "subject matter" of language, number and mathematics, geography, science, and the like, and through the centuries they had perfected its statement of principles and organized its techniques. It was an achievement, the outstanding achievement, indeed, which distinguishes modern men from primitive peoples. It was the "social heritage."

With this generalization every thinking person today will, I am confident, agree. The point has already been voluminously illustrated in the early chapters of this book. But that we will accept the application to education that was then made of the generalizations is very doubtful. For the prevalent conception of schoolmen was that this body of knowledge and skill constituted the curriculum of the schools. And the task of learning was to acquire this body of knowledge and skill with dispatch and retentiveness.

It is not difficult to understand their reasoning. Society, having evolved modern institutions, — an economic social system and a political structure, — could perpetuate itself only by passing them on to the children and youth of each generation. This, however, should be done by means of subjects of study which were organized in the way in which adult minds used them.

Note two points: first, the "social heritage" and the content of the knowledge and skill of the academic subjects of study (mathematics, geography, "science," etc.) were regarded as synonymous; second, the school should pass on these knowledges and skills arranged in the same perfection of form in which mature minds, after millennia of struggle, had organized them.

No educational concepts are of greater importance for the understanding of the educational work of today than these two—that the curriculum is a definitely accepted body of facts and skills, and that learning consists of acquiring them efficiently. There were almost no educators in America in 1870 who did not believe this. Even at the beginning of the twentieth century those who held different conceptions were few and far between. Witness, for example, Colonel Francis W. Parker's experiments in educational reconstruction at Quincy, Massachusetts, and at the Chicago Normal College, the psychological writings of William James, the studies of John Dewey, and the teachings of the American disciples of Herbart. But the idea of education as the all-round growth of an individual was held by only a small number of people up to the time of the World War.

Thus education was regarded as something that goes on in a "school," something you do before entering life, something you do with words. It was conceived of as learning certain "subject

matter," deciphered, arranged, and taught by adults — subject matter, furthermore, that was not directly related to the interests and needs of the children learning it. The curriculum was not thought of as the natural, guided experiences of young people; it was "the ability to give back on demand certain phrases and formulae which had been acquired, without [necessarily] adequate understanding of their meaning."

Administrators Recognized that the Graded System Was Not Working Well

In increasing numbers after 1870 superintendents and principals recognized that something was wrong with the graded-school system. Each year when June came, a large number of children were unable to pass their examinations, received low marks, and were "failed." That is, they failed to be promoted, thereby suffering the greatest ignominy possible to a school child. One fourth, even one third of the children failed in "arithmetic"; in the primary grades an equally large proportion failed to "read" as well as the system demanded.

Now the rank and file of school administrators blamed the children for their failures. The course of study, they said, was all right. The school system was essentially right. The scheme of class instruction was far superior to the old monitorial or "individual" methods. As we have been saying, they accepted "subject matter to be learned" and therefore blamed the individual differences of children for their failure to "take in" the "given" curriculum, that is, the social heritage.

But as the years passed, an increasing number of schoolmen began to question these complacent judgments. They began to agree with Frederic Burk, who after 1900 led a widespread movement for the individualization of instruction. Burk phrased the situation sensationally:

THERE ARE NO MISEIT CHILDREN

There are misfit schools, misfit texts and studies, misfit dogmas and traditions of pedants and pedantry. There are misfit homes, misfit occupations and diversions. In fact, there are all kinds and conditions of misfit clothing for children but — In the nature of things there can be No Misfit Children.

These progressives, therefore, laid the blame for the children's failures to the administrative machinery of the school. Some of them said, "The grading system is at fault"; others, "The method of promotion is wrong." Still others insisted that pupils of unusual ability should not be taught in the same class with others of less ability. Another group claimed that the plan of housing the children was wrong — that in place of an eight-year elementary school followed by a four-year high school there should be a six-year elementary school followed by a three-year junior and a three-year senior high school. Still others insisted that adequate incentives were lacking, and that pupils should be given credit in terms of the quality or quantity of work done. Some said that the marking system was all wrong, that teachers' marks were not adequate measures of what the children did. And others, deploring the fact that young people were turned loose to study their lessons without supervision, said that the solution was "supervised study." Finally a few insisted that the subject matter of the curriculum was too rigidly organized, and that the existing subjects of study should be divided into more flexible units and so arranged that young people could learn them at their individual rates of speed.

The more vigorous proponents of administrative change not only theorized; they also did something about it. They experimented with all sorts of schemes for administrative rearrangement. The administrative literature of the years between 1870 and the World War was filled with such "plans." But through it all the content of the curriculum was regarded as sacrosanct. The "subject-matter" itself was sound; only the machinery was bad.

To understand clearly the futility of these decades of administrative rearrangements let us examine the plans a bit. In doing so, let us bear in mind the basic misconceptions of curriculum and psychology of learning and ask ourselves whether the changes that were made went to the heart of the educational problem.

II. A Multitude of Plans for Administrative Rearrangement

1. More Frequent Classification and Promotion of Children

Perhaps the earliest attack upon the problem was made by Dr. William T. Harris, superintendent of schools in St. Louis, Missouri, from 1867 to 1880, and United States Commissioner of Education from 1880 to 1006. In his annual reports as superintendent, especially those made from 1868 to 1874, Harris described the St. Louis promotion plan which he was devising. It was a scheme for re-forming classes four times each year, an innovation which contrasted sharply with the annual promotion plans then in use in most school systems. For nearly forty years Harris waged a vigorous propaganda on the platform and in the educational press for the breaking up of the rigid scheme of grades into which pupils and subject matter had been organized. He showed that frequent reclassification is necessary because of enforced absences from school, but mainly, he pointed out, because of the widely differing rates at which children can do the schoolwork, and the consequent suffering to both bright and dull pupils when compelled to maintain the pace of the average.

His reports were widely discussed, and his plan of more frequent promotions was slowly tried out in other systems. It is the "short-interval" plan, which was the parent of a host of other promotion plans that evolved in the next quarter-century.

Also conspicuous among the planners was Superintendent Shearer of Newcastle, Pennsylvania, and later of Elizabeth, New Jersey, who developed a scheme very similar to that of Dr. Harris. It was Shearer's article "The Lock-Step of the Public Schools" which fixed attention upon the prisonlike march of young people through the school machine, and it was his phrase "the lock-step" which came to be a slogan in the common parlance of the public.

2. THE CAMBRIDGE AND OTHER "PARALLEL-TRACK" PLANS

As a result of the work of Harris and his associates a wide-spread movement was initiated during the early 1880's and 1890's by which young people could learn the subject matter of the curriculum at different rates of progress. In Cambridge, Massachusetts, for example, the so-called "double-track" plan was devised. This plan enabled rapid students to finish the work of grades four to nine in four years while slower children would take five or six years. This was accomplished, not by changing the curriculum, but by providing transfer points at which, on completion of a prescribed amount of subject matter, pupils could move from one to another parallel group.

In Le Mars, Iowa, the Cambridge plan was worked out for the entire elementary school, the children doing the nine years' work in six, seven, eight, or nine years. Reports from schools adopting such plans showed that a considerable number of pupils completed the full course in less than the conventional time. In general, about one third of them saved a year or more. More important still, the "failures" were very few indeed.

Other cities, such as Portland, Oregon, and North Denver, Colorado, devised schemes by which the entire curriculum was divided into units, or cycles, and classes were organized to move through these units at varying rates of progress. Superintendent J. H. Van Sickle of North Denver insisted that "no mechanical plan of grading can adjust itself to the individual differences of the pupils." He pointed out that children reveal different interests and aptitudes for different subjects of study, and concluded that each child should be "promoted" in terms of his average achievement in all the subjects. Hence he developed a plan by which individuals were promoted from class to class whenever their attainments showed that this could be done, a plan known as "promotion by subjects."

3. "RICHER" CURRICULA FOR BRIGHTER PUPILS

It can be seen that the foregoing plans were primarily aimed at "economy of time," a frequently heard educational slogan of the period. As the movement advanced, however, many school administrators insisted that this was not the fundamental problem. The real problem, they said, was to "enrich the course of study."

Perhaps the most talked-of plan of this "enrichment" type was the Santa Barbara, California, plan. This plan, like all the others, accepted the notion of the curriculum as a body of school subjects, — reading, arithmetic, geography, and the like, — but it devised three different courses of study in each subject, one for the slow, or C, pupils, another for the mediocre, or B, pupils, and still another for the bright, or A, pupils. In arithmetic, for example, the slow pupils would learn merely a minimum list of operations and develop a moderate amount of skill. The B course required more problems demanding a somewhat higher degree of skill; the A course required thorough mastery, the solving of still more problems, and the doing of even more difficult and complicated work.

To the sponsors of such plans "enrichment" meant quantitatively more of a subject. It did not mean more kinds of activities, richer experience; it meant reading more books in a subject, working more problems in arithmetic, getting more practice in handwriting, learning more geography and history facts. The whole plan assumed, as did the others, that the curriculum was a fixed body of knowledge; hence "enrichment" meant only more knowledge and more skill as set down within prescribed academic subjects.

4. CLASSIFYING AND TEACHING CHILDREN IN GROUPS OF SOMEWHAT EQUAL ABILITY

Slowly but surely the preponderance of school administrators recognized and accepted the fact of great differences in children's abilities. One obvious administrative device which promised to fit the curriculum to these varied individuals was to group those of approximately the same intelligence, motor skill, or social experience into the same classes. As one looks back upon forty

years of educational history, he sees that this administrative solution of the problem has been tried out by several successive groups of administrators. In the 1890's there was much consideration of the problem; again in the early 1900's; again about the time of the World War; and today we are in the midst of the fourth attempt.

The proponents of "ability grouping," as it is called, advance the same arguments as the advocates of promotion plans—namely, that it meets the problem of varied capacity among the pupils of any grade; that it eases the teacher's burden of devising special work for advanced or retarded children in mixed classes; that it eliminates both the waste of time of the bright children and the fears and inferiorities of the slower children. How much wiser, they say, to teach the children of one general level of ability together! How much easier to plan the course of study, to assign work, to hear recitations, to examine and mark, to decide who is ready for promotion! Thus goes the argument of the proponents of the plan.

Schoolmen, however, have not been all of one mind concerning it. They point out that there are arguments against it as well as for it. In the first place it can be used only in the larger school communities where there are enough children of the same age to form more than one class at each grade level. In the second place each child is a unique integration of differing capacities, interests, aptitudes, special abilities. One child may be interested and efficient in abstract work, — mathematics, science, and the like, — but may dislike music, painting, and other art activities. Another may be efficient in the routine skills of spelling and handwriting, but may be utterly unable to manage the reasoning problems of mathematics. Still another may be adept in physical games and manual skill, but may be unhappy when confronted with other types of activities.

It is a well-known fact, say students of childhood, that no one scheme of classification can bring together into one group children of approximately equal abilities in all the work of the curriculum. The curriculum consists of a great range of individual and group experiences and many kinds of activities — intellectual, physical,

creative, routine. If the children are classified in terms of reading, writing, and arithmetic, for example, they will not be well classified, therefore, from the standpoint of manual skills.

The opponents of ability grouping, holding a different philosophy of education, maintain that there are many kinds of group activity in which a general cross section of the child population should live together. Children of a variety of personal interests, economic and social backgrounds, and opinions and beliefs should participate, they say, in the same social group. They maintain that this is the situation in life outside the school — in neighborhood groups, in churches, in economic and social organizations; and they conclude, therefore, that heterogeneity should be preserved for the sake of the interpenetration of minds in open-forum discussion, in group creative work, in the organization of the school, and the like.

These, then, illustrate the outstanding conditions and arguments which have been advanced on the topic of ability grouping throughout two generations of administrative attempts at reorganization.

5. Adapting the School to the Child by Better Marks and Tests

Some educational workers have insisted that the chief reason for our huge percentage of failure and nonpromotion lies in the inaccuracy of the marks and tests by which pupils' work is measured. Shortly after 1900, under the leadership of students of college education, investigations were made showing that teachers' marks are only moderately accurate measures of actual pupil attainment.

This conclusion was arrived at by comparing the numbers and percentages of A's, B's, C's, D's, etc. which teachers gave with the numbers and percentages which they should have given. It would have been impossible to make this study were it not for previous investigations and measurements of human abilities. Before 1900, indeed, man's physical traits had been well catalogued, and it was known approximately what percentages of the total population revealed given amounts of a particular trait. After 1910,

as we shall see in more detail later, scientific students of mental ability had also devised fairly good measuring instruments with which to test either general mental ability or attainments in the three R's. Hence the reorganizers of marking systems maintained that teachers who failed one fourth or more of their students or who gave a preponderance of A's and B's could not be really measuring student attainments.

For the two decades before and after the World War thousands of administrators discussed and revised the existing methods of testing and marking children. An enormous amount of educational effort went into the movement. It helped school people to distinguish between the capacity or ability of a pupil and his actual performance. Faculty meetings in thousands of American communities discussed such questions as the following: What is measured by school marks? How much of this measured "thing" do our children have? What marks do teachers actually give? What marks should they give—that is, in what proportions? What do we really know about the reliability of teachers' marks? How can they be given more objectively? Should we abolish letter and percentage marks altogether? Could we replace them by word descriptions and full personnel records of each child? Should pupils be ranked in ability at all?

By and large, however, the intense concern of administrators for better tests and marks affected the curriculum very little. Discussions were based on the usual misconception that the course of study was a score or more of school subjects to be learned by reciting lessons from books. The results of the "testing movement" expanded this narrow conception of a program of work little, if at all.

6. Providing Incentives by Giving "Credit for Quality"

While some educational reformers were developing better classification, promotion, and marking schemes, others were experimenting with administrative devices for providing incentives to superior work. One of these devices was the giving of additional "credit" for better qualities of work done.

The point has already been made that under a heterogeneous grouping brighter pupils tend to mark time, becoming bored and indifferent while waiting for the others to catch up. To correct this, innovators at the University High School of Chicago proposed to provide additional activities for brighter pupils who early completed the minimum prescribed course. To provide adequate incentive for doing this additional work, they rewarded these brighter and more industrious young people by giving them additional credit. This, they maintained, would achieve the goal that they were seeking, namely, economy of time, and would at the same time contribute to enrichment of the curriculum in terms of the varying interests and aptitudes of the students.

7. ECONOMY AND GREATER EFFECTIVENESS THROUGH SUPERVISING THE STUDY OF PUPILS

Still other educators said that the chief fault with the system was that it did not teach young people how to study. It depended too completely on reading books and learning words, they said, and hence paid too little attention to the task of learning how to do intellectual work. The few abler students who possessed initiative and intelligence seemed to work rapidly, comprehend well, and retain what they learned; but this they did through intuitive methods of work. That very fact, the leaders said, made the problem of teaching others how to study all the more evident. Hence elaborate plans for "supervising study" were undertaken. Textbooks were written on the subject. Teachers' institutes and conventions devoted programs to it. A vast literature of discussion grew up.

Under this plan "homework" was abolished, or at least markedly reduced. Homework is inefficient anyway, said the supervised study-ites. Parents generally do their children's lessons for them or, if they really teach them, break down the habits of the school by using different methods. This reaction to homework is interesting because it illustrates once more the narrow attitude that education is something that goes on in a school-house isolated from home and community. Let us have all the

schoolwork done in the school, said the advocates of supervised study. Let us increase the length of period for each subject and give a definite part of each period to study under the teacher's supervision.

8. Economy of Time by Reorganizing the Grades

As we have already seen, the public-school system gradually had come by 1800 to include twelve numbered grades in addition to a kindergarten of one or two years. With the exception of certain Southern states where the elementary school was seven years. and some New England states where it was nine, the plan followed throughout the country was an elementary school of eight grades and a high school of four. The mass of young people, therefore, entered the first grade at the age of six; graduated from high school at approximately eighteen; and, if they were going to college, went at once, and graduated at the age of twentytwo. Those who then went on into a profession took their graduate work in our professional schools, and, graduating at the age of twenty-five or twenty-six, worked as interns or other assistants for a year or two, and entered their professional work at last at the advanced age of about twenty-seven. It was indeed a thoroughly standardized educational ladder, reaching from the kindergarten to the professional school. The rank and file of schoolmen admired this outcome of a hundred years of school-building and unquestioningly accepted it.

A small body of pioneering experimentalists arose, however, who attempted reorganization of the ladder in the hope of achieving economy of time. Toward this end they proposed to change the entire organization of the graded school itself. The leadership in this movement was taken by President Charles W. Eliot of Harvard University, who read an epoch-marking address before the Washington meeting of the National Education Association in 1888. In it he advocated a number of administrative reforms, the outstanding one being the reduction of the twelve-grade

^{1&}quot;Can School Programs be Shortened and Enriched?" This is a chapter in his Educational Reform, p. 169.

public-school curriculum by two years. He pointed out that the schools of the leading European countries were so organized that young people could pass through college and enter their professions two years younger than in the United States. He urged the public-school leaders of America to find a way to economize time, preferably by the elimination of one or more of the school grades. Among his suggestions for accomplishing this were improving the teaching staff, increasing the tenure of office, increasing the proportion of men teachers, lengthening the school day and the school term, devising more flexible promotion plans, improving the course of study (putting richer content into it and making it more interesting), and cutting down the wasteful amount of time devoted to "reviews."

This address aroused nationwide discussion of the need for reorganization of the elementary-school and high-school programs. Among other things, it led to the appointment of a famous national committee, — the Committee of Ten, — of which Eliot was made chairman. In another address four years later, in 1892, President Eliot continued his plea for the reorganization of the schools, especially advocating the "enrichment of the program of studies."

These two addresses launched a nationwide discussion of optional plans of grouping the school grades. Three types of administrative rearrangement were discussed in the movement which developed. One was the proposal to economize time by eliminating a year or more from the educational ladder. Another was the value of the 8-4 system (eight-year elementary, four-year secondary) as contrasted with the 6-6 or the 6-3-3 plans (six elementary, three junior high, three senior high). Other groupings also were suggested, such as the 8-4-2.

As a result of the widespread debate before national education associations and in the educational press of the 1890's, many elementary schools reorganized their plan of having a single teacher teach all the subjects in the seventh and eighth grades, and introduced the departmental plan, in which the curriculum was divided into a smaller number of school subjects and a teacher taught several classes in the same subject.

Tust at the beginning of the new century the discussion of the rearrangement of the grades took another turn. In 1901 Professor John Dewey, and in 1902 President William Raney Harper, stimulated schoolmen to consider the regrouping of the school grades. The elementary school that had been established by Dewey in 1806 as a private laboratory institution, and had been incorporated with an experimental high school in the School of Education in The University of Chicago in 1001, was an elevengrade school — seven elementary and four secondary. As a result of the discussions which took place, the University of Chicago group, with the co-operation of Superintendent Greenwood of Kansas City, Missouri, and others whose schools were similarly organized, urged that the schools of the nation could very well save a year by reducing the eight elementary grades to seven. In the discussion of the plan others suggested that it would be far wiser to maintain the twelve-grade scheme, since thousands of school systems were already organized on that plan; they wished to regroup these grades into six and six.

In the next ten years school systems began to experiment slowly with the various proposals. Out of a great diversity of trial and error there came eventually the "junior-high-school" movement, which shortly after the World War was adopted in nearly a thousand school systems. This movement divided the schools of the larger communities into three levels, reducing the elementary school to six grades; it created a new junior high school, generally in a separate building, and reduced the senior high school to three years. This was done in many places because of the rapid increase in the numbers of children remaining in school.

III. Attempts to Individualize the Subject-curriculum

The foregoing movements were administrative efforts to fit the school to the child by promotions, reclassifications, measurements, supervision, and the like. Practically all these plans ignored the curriculum. During the same years, however, another group of innovators was insisting that the school could be improved only by rearranging the materials of the curriculum so that pupils could master them at their own individual rates of work. Hence forty years ago a movement to individualize the subject-curriculum started. This movement and variations of it have spread in one form or another to hundreds, even thousands, of school systems in the United States and have been tried out in a score of other countries.

THE FIRST VOICE: PRESTON SEARCH

In the very year that Eliot made his pronouncement before the National Education Association, Superintendent Preston Search of Pueblo, Colorado, began his pioneering attempt to individualize the work of the schools. In many ways his plan was a return to the historic European individual plan in which the teacher heard each pupil recite on work that he had completed. The idea of the class reciting together as a whole was abolished. The teacher went from pupil to pupil, questioning, advising, correcting. As Mr. Search put it, each child "actually and absolutely recites every chapter and line of his Latin, every section of his other studies, and passes his examination in the most thorough manner."

This was the plan used in all the high schools of Pueblo, Colorado, during Mr. Search's superintendency, 1888–1894. The school day was divided into six periods, each an hour long, three periods being devoted to "literary studies," and an hour and a half "to be spent wherever the pupil needs it most, or in most cases according to his individual bent."

In the high school the work was completely departmentalized. In all the grades the distribution of time was left largely to the teacher's judgment. Search's plan is described in his book *The Ideal School*. Although it was ridiculed by the rank and file of schoolmen, some were inspired to develop individualization plans of their own. This happened, for example, in Newton, Massachusetts, under Superintendent Frank Spaulding, and at Batavia, New York, under the leadership of Superintendent John Ken-

nedy. The Batavia plan was widely discussed in the early 1900's, especially after the publication of Dr. William H. Holmes's excellent *School Organization and the Individual Child* (1912), which described various plans for fitting the machinery and the curriculum of the school to the pupil.

THE BURK PLAN OF INDIVIDUAL INSTRUCTION

Twenty years passed from the time of Search's first pronouncements. Then, in 1913, Dr. Frederic L. Burk and the training-school department of the San Francisco State Teachers College launched a more systematic plan of individual instruction. It has been the Burk experiments and reports which have stimulated the world-wide movement of the past fifteen years. The plan organized all the elementary-school classes from the kindergarten through the eighth grade so that each pupil could pass through each subject in approximate accordance with his particular abilities. Class recitations and group assignments were abolished. Each child was provided with self-teaching textbooks and courses of study in arithmetic, geography, grammar, history, language, and phonics. Daily record charts were kept of the time required for each pupil to complete each unit of each subject.

The results were published in a noted pamphlet, Monograph C. Almost at once schoolmen, reading this monograph, began to experiment with the individualization of content in elementary-school subjects. The fundamental need, of course, was for new textbook material, organized on a clear, unit arrangement so that pupils could know their own assignments, read from the textbooks, test themselves, and then submit to a check test by the teacher. This textbook material, these self-instructive bulletins, were the crux of the whole scheme. More than a hundred thousand of them were sold on a nonprofit and nonadvertising basis to educational workers all over the country, although the work was handicapped by political interference — the state attorney general ruling that such bulletins could not be published by a state institution.

The work went on, however, especially after the close of the World War, through the energetic and pioneering leadership of two teachers trained under Dr. Burk, Dr. Carleton W. Washburne and Mr. Willard W. Beatty, who were the first to develop the individualization of instruction in a public-school system.

WASHBURNE AND THE WINNETKA EXPERIMENT

It was Dr. Carleton Washburne who after 1919 demonstrated that individualization in the elementary school was practicable, even in a small public-school system. With conspicuous energy and courage he built up a teaching staff of loyal and enthusiastic workers who co-operatively conducted an astonishing number of curriculum studies. With their help Washburne wrote textbooks and other teaching materials for reading, arithmetic, history, geography, science; developed teaching devices for spelling; published many articles, bulletins, and yearbooks; lectured all over the United States and in various other countries as well: stimulated the development of college courses in individualization of instruction; and, most recently of all, laid the foundation for a graduate school of teacher-training built around the Winnetka plan. At the present writing his achievements both in stimulating the movement and developing actual subject materials are conspicuous.

SUMMARY AND CONCLUSION

Here, then, in the pioneer work of Search, its practical development by Burk, and the consequent working out of subject materials by Washburne, we have the essence of forty years of attempts to "individualize the subject-curriculum." In appraising this work we must note first and foremost that all the plans accept to a large degree the traditional notion of a curricu-

¹ Mr. Beatty has become one of the outstanding American leaders in the "progressive-education movement," being president of the Progressive Education Association, 1933–1937. He became superintendent of schools in Bronxville, New York, in 1926, and there he has developed a unique combination of individual and socialized work.

lum of subject matter—facts and skills—made out in advance, a definite, prearranged task to be accomplished by the pupil. Only in the recent years of the Winnetka and the Dalton experiments has the concept of the curriculum as a widely ramifying scheme of group and individual activities been incorporated in the plans. But we must note that even the Winnetka plan divides child development into two fairly unrelated parts. As Kilpatrick put it in appraising this plan: "The gap still remains between the individual drill work and the freer group work. The two parts of the school do not connect. And unfortunately, in the whole discussion at Winnetka, learning by goals seems to be counted as the essential."

In these forty years of attempts to fit the machinery and the curriculum of the school to the individual child, we have seen that administrators for the most part regarded education as "acquiring specific subject matter fixed in advance." Professor Kilpatrick, as one of the leaders in another kind of educational reconstruction (which we shall discuss in later chapters), insists that education

is the continuous re-making of life by acquiring subject matter as it is needed for present behavior. When we can see this and understand the necessity for the unity of selfhood, then we shall see why drill, though necessary, must be subordinated to life — why the school, to be finally satisfactory, must be continuous with life.¹

IV. Curriculum Rearrangement via "Committees"

These, then, were the chief attempts of the school administrators to undo the evils of the graded school by arranging more flexible promotion, classification, marking, and individualizing schemes. Although their efforts were devoted primarily to the improvement of the machinery of education, they also paved the way for real improvement in the curriculum itself.

¹ Twenty-fourth Yearbook of the National Society for the Study of Education, Part I, p. 285 f. Public School Publishing Company, Bloomington, Illinois, 1925.

For more than a quarter of a century, however, they were opposed by the administrators of colleges and secondary preparatory schools who feared individual diversity in courses of study, grading, classification and promotion, and measurement of attainments. These advocates of the *status quo* desired standardization, uniformity, organized methods of teaching. They wanted continuity in the educational system. Smooth mobility of the scholastic population was their desideratum of efficient school administration.

These defenders of the classical faith came into power in the early stages of the widespread discussion that was stimulated by President Eliot's 1888 address. His attack upon the public-school program, although aimed at producing increased flexibility and effectiveness, actually served as the impetus to bring about a prolonged movement for rigid standardization of the curriculum of the schools. In the two years immediately following his address (1889–1891) Eliot and President James H. Baker of the University of Colorado led a widespread propaganda for the development of national conferences to be devoted to the reorganization of secondary education. Primarily through their efforts the National Council of Education, an important subsidiary of the National Education Association, discussed the matter vigorously, and in 1891 appointed the famous "Committee of Ten on Secondary School Studies," generally called the Committee of Ten.

Curriculum-making, from the day of the Committee of Ten, was predominantly via "Committees," especially national and regional committees. The National Education Association, through such important subsidiaries as the Department of Superintendence, has been one of the important formative influences in the development of the school curriculum. Specifically it sponsored such important reports as that of the Committee of Ten (on secondary education, 1893), that of the Committee of Fifteen (on elementary education, 1895), the reports of its two Committees on Economy of Time (elementary education, 1908 and 1914–1919), the reports of its Commission on the Reorganization of Secondary Education (1920), and the more recent yearbooks of the Department of Superintendence (1924–1929).

From the Committee of Ten to date, with few exceptions, national committees have been dominated by specialists in subject matter and by a faith in mental discipline. Their personnel has only rarely included professional students of the curriculum—that is, of the study of society, of child abilities, interests, and capacities, of rates of learning, of grade-placement, and of experimentation.

Lacking interest and training in the professional field of curriculum-making, the members of these national committees used subjective and a priori methods in arriving at their recommendations, and largely ignored the results of curricular research. The basis of recommendations for change was individual judgment.

Once in print, the pronouncements of national committees were quite generally followed, both in major outline and much in detail, by town and city schools throughout the United States. Thus special academic points of view became entrenched. The curriculum crystallized, became difficult to change. One committee supported another and acquiesced in the elimination of particularly obnoxious elements from the curriculum only after prolonged and reiterated demand from curriculum-reformers.¹

It was curriculum-making by accretion and elimination. New topics were added slowly within the school "subjects," but the total reconstruction of the curriculum was never considered by these subject committees.

Until after 1919 there was almost no utilization of objective methods of investigation by these national committees. Careful search of their reports (prior to the report of the National Committee on Mathematical Requirements, 1923) fails to reveal a single instance in which a committee set up experimental and

¹ I recall, for example, the years of argument which were necessary, from 1910 to 1917, in the Central Association of Science and Mathematics Teachers to secure the elimination from the high-school algebra course of such a useless topic as the "factoring of the cubes"! Although we were striving for a complete reconstruction of mathematics to fit the needs of contemporary life, we made progress only by concentrating upon the elimination of particular processes and upon reorganization around specific themes.

scientific studies to aid them in their choice of recommended content, grade-placement, and organization of the materials of the curriculum.

The case is worse than that, however, for the indictment of the armchair methods of these "subject-matter" committees. The search reveals practically no use of the conclusions of available curriculum studies. Not until after 1920, with the financing on a large scale of national committees in mathematics, classics, modern languages, and history, did a national committee engage trained executives as investigators actually to make use of quantitative studies of curriculum-making.

THE INFLUENCE OF THE COMMITTEES THROUGH COURSES OF STUDY AND TEXTBOOKS

In spite of the opinionated basis of the recommendations of the national committees, they exerted a tremendous influence in shaping the school curriculum. The prestige of their reports was so great that, once published, their recommendations were copied into entrance requirements of universities, and they constituted the outline to which textbooks had to correspond if the authors and publishers expected widespread adoption. Both state and local (town and city) systems came to base their syllabi definitely upon the recommendations of the committees.¹

Authors and publishers of entrenched textbooks played an important role in this a priori committee work. Frequently they served on the committees and wrote the recommendations. I have before me as I write the report of one national committee, representing a great association, in which the outline of topics recommended by the member who wrote the report follows almost exactly — indeed, almost verbatim — the order and treatment

¹ Many examples abound. Professor R. M. Tryon, for example, in reporting a survey (1911) of the content of history instruction in the town and city systems of Indiana proved that the report of the Committee of Eight, published in 1909, had influenced directly and systematically the detailed organization of the curriculum in history in those towns and cities. (R. M. Tryon, Materials, Methods, and Administration of History Study in the Elementary Schools of the United States, Indiana University Studies, No. 17.)

in his own textbook. According to the statements of members of another committee (one of the most influential of recent national committees), its procedure and recommendations were dominated by the author of the most widely used series of textbooks in the subject in question.

Moreover, the "scissors-and-paste method" was used by new authors and publishers who desired to secure widespread adoption of their books and who feared to deviate widely from current practice. The new books were made from old ones. After the first national-committee reports, textbook companies, with an eye to sales, tended to form partnerships of "professors" and public-school workers — superintendents, principals, or teachers. The maintenance of the *status quo* in the social scene was the desideratum. Innovation was not favored; indeed, it was accepted only grudgingly after new proposals had slowly secured a widespread hearing from progressive school people, who themselves had been trained in the new methods.

NEW TRENDS AFTER THE WORLD WAR

The examples discussed to this point illustrate fairly the personnel of and procedure employed by national and regional committees from 1891 to the close of the First World War. Throughout the entire period, however, new trends were developing which were to alter thoroughly the methods employed in curriculum-construction and the consequent content and organization of the program itself.

First there was the advancing social trend itself. A small but growing group of students of society began to sense the meaning of the startling changes that were revealing themselves in industrial culture. Even immediately after the close of the war a few of the greatest of these — for example, Thorstein Veblen, a truly great man of our generation, and Charles A. Beard, John Dewey, Randolph Bourne, Van Wyck Brooks, Waldo Frank, et al. — saw that America and the other industrial nations were moving swiftly into a new social epoch. The manner in which the work of these pioneers of thought came to affect the educational

program is sketched in Chapters XII-XIV, to which the reader is referred at this point.

Within the professional fields of curriculum-construction itself, however, two new trends were developing after 1910. The first was the movement for the so-called scientific study of education. After 1920 this movement played a very important part in another strand of committee development, as was revealed especially through the work of committees of the National Society for the Study of Education, of the Progressive Education Association, of the Department of Superintendence of the National Education Association (especially in collaboration with its Bureau of Research), and of the American Educational Research Association. These are discussed in Chapter X.

The other trend within the field of curriculum-making was the rise of the experimental laboratory schools—a movement which, launched nearly half a century ago by Francis W. Parker and John Dewey, eventuated in hundreds of curriculum experiments in the quarter-century following 1910. This trend is discussed in Chapter XIV.

One important consequence of the advance of these new trends, both in the changing culture of American society and within the field of education itself, was the emergence of more professional and technically trained students of curriculum-construction. And this in turn gradually changed even the personnel and methods of the new national committees of the subject-matter associations. For example, since 1920 five conspicuous national committees have reported on curriculum revision within their subject fields. These are

- 1. The National Committee on Mathematical Requirements (1920–1923).
- 2. The Classical Investigation (1921-1925).
- 3. The Modern Language Study (1924-1925).
- 4. The Preliminary Study of History and Related Subjects in the Schools (1925).

¹ In the Twenty-sixth Yearbook of the National Society for the Study of Education I described and appraised the work of the first four of these committees. See also articles referred to in the Appendix of this book, p. 462.

5. The Joint Commission on Social Studies in the Schools, American Historical Association (1930–1934).

These committees were unique in another respect: they were well financed by one or more of the "foundations" — The General Education Board (Rockefeller), The Carnegie Corporation, The Commonwealth Fund, and The Laura Spelman Rockefeller Memorial.

If the work of these five committees be reviewed in chronological order, one conclusion will be apparent — that at last the professional students of society and of education are coming into their own in curriculum-construction. Whereas the committees for mathematics and classics continued almost unchanged the personnel and methods of the earlier subject-matter committees, those for modern languages, history, and social studies made use of a far more professional and scientific procedure.

CHAPTER X · CURRICULUM-CONSTRUCTION AND THE SCIENTIFIC STUDY OF EDUCATION

APPROXIMATELY to the year 1910 the leadership in curriculum-making was in the hands of college and private-school administrators and subject-matter specialists; and curriculum-making was dominated by an interest in scholarship, mind-training, and knowledge for knowledge's sake. With the close of the first decade of the twentieth century, however, a new and vigorous leadership was offered, that of the students of more objective procedures in education.

Under the leadership of Thorndike, Judd, Cubberley, Ayres, Terman, Horn, Courtis, Freeman, Gray, Gates, and others, the quantitative method began to be applied to the solution of educational problems. The fact-finding era was launched; it was the day of the question-blank and the school survey. Learning was being experimentally investigated in the laboratory; "tests" entered the classroom. Scales were offered as means of measuring abilities hitherto regarded as incapable of measurement—handwriting, reading, composition, and drawing.

Thorndike made available the statistical procedure of the British biometricians (1903); standard deviations and coefficients of correlation were in the air. And as we have seen, many matters of administrative importance were being studied by the new quantitative technique. It was "administration" that in the years from 1910 to 1915 lured the vigorous minds, and it was during this time that a new type of committee personnel and procedure came into existence to further and to apply the new methods of educational research.

New Types of Committee Procedure

The new movement began with the work of the National Education Association's Committee on Economy of Time, a committee of educationists. The personnel of this committee marked it out sharply from all the preceding ones. Three of the seven members were professors of education or of educational psychology; three were superintendents of schools; one was a college president. It was organized in 1911 under the leadership of Superintendent H. B. Wilson, was in existence eight years, and made four conspicuous reports.

The antecedents of the committee lay in the work of the Baker Committee on Culture Element and Economy of Time. Economy of time to the Baker committee meant the elimination of a grade or more from the public-school scheme or the rearrangement and recombination of school and professional courses. Beginning with the Wilson committee, however, economy of time was to be secured through the employment of more "scientific" methods in the determination of socially worth-while materials, their grade-placement, and their organization to fit the life needs of pupils. Research began slowly to supplant armchair pronouncement.

In procedure, therefore, as well as in personnel, a turning point was marked. The new committee devoted itself nearly altogether to the utilization of quantitative methods of curriculuminvestigation. Indeed, its real aim was to illustrate how these methods could be employed.

The early meetings of the committee revealed the influence of the new measuring movement which was just getting under way. Thorndike's handwriting monograph had appeared in 1910; the Courtis tests, in the years following 1909. The reports of the first school surveys of Baltimore, Portland, Cleveland, and Salt Lake City appeared during the years from 1912 to 1915. Programs of annual meetings of the Department of Superintendence included vigorous discussions of the new quantitative movement. In these the four reports of the Committee on Economy of Time played an important role. These reports appeared in the fourteenth

(1915), sixteenth (1917), seventeenth (1918), and eighteenth (1919) yearbooks of the National Society for the Study of Education and formed the basis of its annual program for four years.

The steps by which the new educational measurers began to apply methods of research to the study of the curriculum were, first, the construction and use of tests in arithmetic, spelling, language, algebra, etc.; second, the inventory of the current curriculum by the tabular analysis of "courses" of study and textbooks; third, the determination of socially worth-while skills and knowledge by the tabulation of actual human activities; fourth, and much later, the careful determination of trends in societal development, the chief institutions and problems of contemporary life, standards of appreciation, etc.

A growth in the movement from an initial interest in the mere tabulation of the contents of the existing courses and textbooks toward the difficult analysis of learning and of contemporary society is revealed in the successive reports of the committee. The first report was devoted largely to investigations of standards of attainment in the school subjects, description of experiments under way for economizing time in elementary education, and analysis of time-allotments by subjects and grades in representative cities; that is, it was a description of existing practices. The study of the school curriculum was slowly but surely concentrating more attention upon what should be taught, was devoting less energy to the analysis of what was taught; and the second report included several objective curriculum-investigations.

The third report ² of the committee dealt even more largely with the discovery of what skills and factual content *should* be taught. The theory of the quantitative analysis of the curriculum was being rapidly developed. Under Horn's stimulation, discus-

¹ In this connection it is interesting to note that the National Herbart Society originally included in its title the words "for the Scientific Study of Teaching." In 1902 its name was changed to the National Society for the Scientific Study of Education. Not until 1910 was the word "scientific" omitted from the name of the society, at approximately the very time when scientific methods were beginning to be employed.

² Seventeenth Yearbook of the National Society for the Study of Education, Part I. Public School Publishing Company, Bloomington, Illinois, 1918.

sions were appearing of the utilization of the principles of social use — its "frequency," "universality," and "cruciality." In the third report Mitchell published an outline of his analysis of cookbooks, factory pay rolls, marked-down sales, advertisements, and trade catalogues, which had been made to find out which fundamental arithmetical operations should be taught to all pupils. Camerer tabulated what bankers thought citizens should know about banking. Branom and Reavis tabulated the statistical data of land areas, populations, and trade to determine map location facts in geography. The third report continued attempts to determine the content of primary readers by analysis of existing books. Bassett tabulated the content of state and national political platforms from 1860 to 1916 to discover the fundamental recurring problems for the course in civics, and Swisher analyzed the important social-science reference books. In the third report was continued the practice of discussing the setting of norms and standards.

It was an orgy of "tabulation."

With the fourth report ² the committee entered upon a new phase of curriculum analysis. This report contained the first synthesis of scientific investigations of learning. In it school people found definite recommendations as to methods to be employed in the teaching of handwriting, reading, arithmetic, drawing, and music.

The Spreading Influence of the Scientific Movement on Curriculum-making

After 1920 the studies were characterized by much greater completeness. In 1921 Thorndike published in *The Teacher's Word Book* ³ his investigation of the basic ten thousand words

¹ Until the work of this committee there was no systematic proposal to ignore the existing "subjects"; that movement was developing independently in laboratory schools. See Chapter XIV.

² Eighteenth Yearbook of the National Society for the Study of Education, Part II. Public School Publishing Company, Bloomington, Illinois, 1919. ³ Bureau of Publications, Teachers College, Columbia University.

needed in the elementary school. Thorndike suggested several practical uses for the list — for example, in determining emphasis in teaching, in establishing grade and age standards, in evaluating textbook vocabularies, in grading and selecting the content of readers, in determining the frequency of phonic elements.

Home-economics courses were inventoried,¹ and studies of homemaking were initiated. At The University of Chicago from 1915 to 1918 the present writer conducted, in collaboration with John R. Clark, investigations of the socially worth-while material of algebra, geometry, and arithmetic courses, of measured experiments in learning, and of results of utilizing standardized tests.²

By 1923 it was found possible to assemble a score and a half of objective studies³ on which to base the content of the junior-high-school course in mathematics. Important advances were made in the crucial field of the social studies.

The Rugg Social Science Research Group in the Lincoln School of Teachers College, Columbia University, reported, from 1923 to 1929, a series of systematic analyses of the concepts, meanings, generalizations, map location facts, and problems and movements underlying the development of contemporary life which should form the foundation of the curriculum in history, geography, civics, and related studies.⁴

¹ Harold Rugg and others, *Home Economics in American Schools*. The University of Chicago Press, 1920.

² Harold Rugg and John R. Clark, Scientific Method in the Reconstruction of Ninth Grade Mathematics. The University of Chicago Press, 1918.

³ Raleigh Schorling, A Tentative List of Objectives in the Teaching of Junior-High-School Mathematics. George Wahr, Ann Arbor, Michigan, 1923.

⁴ See, for example: "The Social Studies in the Elementary School," Twenty-second Yearbook of the National Society for the Study of Education, Part II. Public School Publishing Company, Bloomington, Illinois, 1923. Objective Studies in Map Location, by Harold Rugg and John A. Hockett. Bureau of Publications, Teachers College, Columbia University, 1926. "The Foundations and Technique of Curriculum Making," Twenty-sixth Yearbook of the National Society for the Study of Education, Parts I and II. Public School Publishing Company, Bloomington, Illinois, 1927. Neal Billings, Generalizations Basic to the Social Studies Curriculum. Warwick & York, Baltimore, 1929. John A. Hockett, The Determination of the Major American Social Problems. Bureau of Publications, Teachers College, Columbia University, 1927. C. O. Mathews, The Grade Placement of Curriculum Materials in the Social Studies. Bureau of Publications, Teachers College,

Ernest Horn synthesized investigations in spelling content made under his direction, carried on new ones, and has published a fundamental list of ten thousand words from which the spelling curriculum should be constructed. Since the first report of the Committee on Economy of Time data have accumulated on the vocabulary of primary readers, second readers, third readers.¹ Elaborate investigations ² of the vocabularies of school textbooks established that they were extremely technical in character, and that they decidedly lacked appropriate recurrence of fundamental meanings. These studies, like those of other aspects of existing curricula, were helpful in determining the direction in which the reconstruction of the school curriculum should move. As these investigations accumulated, it was increasingly possible to fit the content of new school textbooks to the mental abilities and attainments of pupils.

By 1920 the scientific movement was directly influencing the public-school curriculum through the new types of school text-books in the skill subjects. Indeed, as early as 1915 new spelling books appeared in which the content had been selected from the words shown to be actually included in the writing vocabularies of children and adults. General mathematics books and arithmetics were offered to the schools with the argument that the skill operations included in them had been shown by investigation to represent the practical everyday needs of grownups

¹ See the Sixteenth Yearbook and the Seventeenth Yearbook of the National Society for the Study of Education. (Public School Publishing Company,

Bloomington, Illinois, 1917, 1918.)

Columbia University, 1926. Hyman Meltzer, Children's Social Concepts. Bureau of Publications, Teachers College, Columbia University, 1925. Earle U. Rugg, Curriculum Studies in the Social Sciences and Citizenship. Colorado State Teachers College, Greeley, Colorado, 1928. L. F. Shaffer, Children's Interpretation of Cartoons. Bureau of Publications, Teachers College, Columbia University, 1930. J. N. Washburne, "The Use of Questions in Social Science Material," Journal of Educational Psychology, May, 1929. J. N. Washburne, "An Experimental Study of Various Graphic, Tabular, and Textual Methods of Presenting Quantitative Material," Journal of Educational Psychology, September and October, 1929.

² B. A. Lively and S. L. Pressey. "A Method for Measuring the Vocabulary Burden of Textbooks," *Educational Administration and Supervision*, October, 1923; S. R. Powers, "The Vocabulary of High-School Science Textbooks," *School and Society*, July 19, 1924. Technical vocabularies of the school subjects are published in fifteen pamphlets by the Public School Publishing Company, Bloomington, Illinois.

and children. Practice exercises in the various elementary-school subjects and, for example, in high-school algebra were designed on carefully evolved criteria and secured widespread commercial distribution.

The influence of the scientific movement was also revealed in the attempt to grade the materials of the school on the basis of proved trial and measured experimentation.¹ Textbook-makers attempted to apply accepted principles of learning and also conclusions from controlled experiments in the organization of subject matter.²

In the Lincoln School of Teachers College, Columbia University, a number of curriculum-research enterprises developed after 1920. Several studies appeared, reporting attempts to validate the materials of the school curriculum.³ Two systematic, reconstructed schemes of curriculum materials were developed by some ten years of experimentation, in the work of Schorling and Clark in junior-high-school mathematics and of the Rugg Social Science Research Group.

The administrative culmination of the various movements was the development of laboratories and bureaus for curricular research. Conspicuous among the first of these was the development of the Bureau of Research of the National Education Association at Washington, D.C., under the directorship of Dr. John K. Norton and Dr. Margaret Alltucker. A co-operative plan was organized among a large number of school systems for the revision of the school curriculum. The central bureau at Washington published in several yearbooks of the Department of Superintendence⁴ and in the various bulletins of the depart-

¹ See C. O. Mathews, *The Grade Placement of Curriculum Materials in the Social Studies* (Bureau of Publications, Teachers College, Columbia University, 1926).

² See E. L. Thorndike, *Psychology of Arithmetic* and *Psychology of Algebra* (The Macmillan Company, New York, 1922 and 1923).

³ For example, E. W. Finley and O. W. Caldwell, *Biology in the Public Press*, 1923, and Harold Rugg and John A. Hockett, *Objective Studies in Map Location*, 1926 — both published by the Bureau of Publications, Teachers College, Columbia University.

⁴ Second Yearbook (1924), "The Elementary School Curriculum"; Third Yearbook (1925), "Research in Constructing the Elementary School Curriculum"; Fourth Yearbook (1926), "The Nation at Work on the Public School Curriculum."

ment excellent descriptions of the content of existing curricula, of available research studies, and of discussion of the techniques of curriculum-making. This bureau is a permanent, "going" concern and gives great promise of operating as an effective clearinghouse for the discussion and improvement of the public-school curriculum.

New Types of Curriculum-construction in City School Systems

The scientific movement soon began to affect the procedure of city school systems and, in a few instances, the technique of state departments of public instruction.¹

Probably the most conspicuous example of the use of research methods in curriculum-construction in city systems was the work of Dr. Carleton Washburne and his associates in Winnetka, Illinois. During the years of his superintendency Dr. Washburne not only reorganized the classroom procedure of his schools upon a radically individualistic basis but, in addition, made several contributions to the objective discovery of needed materials in the school curriculum. Organized as the Winnetka Research Seminar, he and a group of his classroom teachers and principals produced investigations dealing with the basic facts of the history and geography curriculum for the elementary grades, the grading of elaborate book lists for reading classes, comparative analyses of vocabulary studies to determine the words children are most likely to need to spell, statistical studies of primary reading books to determine the most useful phonograms, analysis of the ten thousand commonest words to discover syllables of the greatest frequency of recurrence, measurements of the speed and accuracy possessed by successful and intelligent adults in arithmetical processes, and grade-placement investigations of children's reading books.

As Washburne's Winnetka organization has been conspicuous for its scientific and practical curriculum-research, so the Denver

¹ See, for example, the bulletins issued by the state departments of education of Connecticut, New York, California, and others.

schools, under the administration of Superintendent Jesse H. Newlon and later of Superintendent A. L. Threlkeld, led the way in experimentation with new types of curricular materials in the elementary and secondary schools and in the creation of a new type of administrative organization and procedure for curriculum-revision in a large city. The Denver program was outstanding because of the adequate financial support for curriculum-revision, the release of skillful and experienced teachers from active classroom work to enable them to concentrate their efforts upon curriculum-studies and preparation of syllabi, the creation of a separate curriculum division of the central administration in charge of a trained student of the school curriculum, the utilization of outside specialists on curriculum-making who have worked for prolonged intervals with those in active charge of a curriculum-revision, and finally because of the attempt to see the problem of curriculum-revision as a whole. Although the Denver program was carried on by "subject" committees, advances were achieved by the merging of a number of the traditional subjects.

In several of the larger cities, programs somewhat similar to that of Denver are either in operation or under way — for example, in Detroit, Baltimore, Los Angeles, Long Beach (California), and St. Louis.

In Burlington, Iowa, under the leadership of the former superintendent of schools, the late Mr. E. M. Sipple, the teachers of the system co-operated for several years in an attempt to break down the lines between the established school subjects and to reconstruct the elementary and junior-high-school curriculum on a basis of five large departments.

Summary of the Application of Research Methods to Curriculum-making

The foregoing analysis reveals, therefore, several different types of investigations which were made as the basis for a more scientific procedure in curriculum-making. There were two active schools of thought among curriculummakers. One group emphasized the preservation of the contribution of the past; the other stressed the more thoroughgoing discovery of needed next steps. The protagonists of the former view believed in the gradual reorganization of the school curriculum by addition to or elimination from the current courses.

Studies of Existing Curriculums. The leaders in this movement are the various bureaus of curriculum-research and such clearing-houses for report and discussion as the Bureau of Research of the National Education Association in Washington. For fifteen years they have been tabulating the contents of the city and state courses of study, the syllabi of national committees, and the detailed contents of school textbooks.

Studies of Social Needs. The other school of thought devotes its energy to discovering social needs and basing proposed curricula upon the findings of such research. They stress the premise that curriculum-making consists essentially in the analysis of American life.

This represents one aspect of what this school recognizes as the twofold problem of curriculum-making. The other is the child — his abilities, interests, and needs as a growing personality. The adherents of this belief are of the opinion that the new school curriculum needs to be largely made over, but that that cannot be done adequately by addition to or elimination from the existing curriculum. This school of thought, therefore, would make studies of needed materials and in doing so would not be unduly swaved by the existing content. These studies would include the discovery of the skills and facts, the problems, institutions, generalizations, and concepts needed to understand contemporary life; optimal grade-placements; the chief learning difficulties as shown by pupils' traits, and abilities as shown by errors; and job analysis in the vocations and professions. Specifically, this school of thought maintains five other types of studies are needed:

1. Studies of skills and facts of proved social worth. For economy of time it is desirable to know which map location facts, which words, which arithmetical operations and processes, which

grammatical forms, should be learned by all elementary-school children in order to live together well in modern, interdependent social life. This is especially important because of the need to leave the great preponderance of a pupil's time free for him to engage in enriching his understanding of himself and of how he and his fellows live together in a complicated world, and in bringing out his potential capacity for creative self-expression and for enjoyment of the fine and the beautiful. There are already available many investigational data: lists of words, arithmetical operations, map location facts, the social worth of which has been proved by objective analysis of human activities.

2. Studies of basic concepts, generalizations, institutions, and problems which are needed for an understanding of contemporary life. Data provided by these studies are coming to be recognized as providing the fundamental skeleton for the entire school course in the social and natural sciences.

3. Studies dealing with grade-placement of material. Already experimentalists are conducting scientific studies to determine the most appropriate ages and grades at which certain types of curricular material can be utilized. I am using the word "scientific" to imply careful organization of controlled experiments, trial of the same materials in a large number of school grades ranging over many ages, and the careful measurement of abilities.

4. Studies of pupil difficulties, errors, and other problems of learning. The movement has already produced tentative studies of pupil difficulties as shown by grammatical errors, the performances of pupils in arithmetic, spelling, algebra, map location, and the like. In the years from 1909 to 1915 scores of learning investigations were carried on. Since 1915, however, with a tremendous swing of interest among educational psychologists and technologists to the investigation of intelligence, educational attainments, and character traits, there has been a great slump in the experimental interest in "learning." Because the sound organization of curricular materials will wait for the carrying on of a great many learning studies, it is to be hoped that educationists will secure large financial support for the conduct of such studies. It should be clear, therefore, that national committees

with money to spend on educational investigations should by all means endow definite measured investigations of alternative methods of organizing curricular materials.

5. Studies of job analysis in the vocations and professions. A large number of analytical studies, many under the direction of Professor W. W. Charters, have been reported in the field of the vocations and professions. Indeed, these studies developed techniques of analysis which later on were utilized in curriculumresearch for elementary and secondary schools. Investigations were made, for example, of traits desirable for the secretarial and pharmaceutical occupations: analyses were made of the jobs (specifying knowledge and skills needed) in the trades of machinist, bricklayer, paper-hanger, railway boilermaker, automobile mechanic, plasterer, tile-setter, printer, garment-cleaner. Paralleling these, investigations were made of homemakers' responsibilities, and outlines were prepared of short courses of instruction. In these job analyses trade difficulties were studied - for example, the difficulties encountered by salespeople or by business executives in handling people. Expert methods which have been found helpful have been assembled in various enterprises.

To What Extent Can the Selection of Subject Matter Be Made Objective?

With two decades of careful curriculum-study behind us, therefore, we can begin to get a perspective of the efficacy of our various procedures. The story of armchair versus educational laboratory sets out boldly one fundamental question: To what extent can the selection of curricular materials be made objective?

From time out of mind, laymen and school people have discussed the question What knowledge is of most worth? Only in our own generation have we systematically attempted to find bases other than that of the personal opinions of the textbookwriter, theorist, professors of collegiate subjects, committee

members, what not. In the past it has been very difficult, if not impossible, for even the greater minds¹ to maintain clear perspectives.

It is exactly the tendency of individual human judgment to lose its bearings and "fail to see the woods for the trees" that led the more scientifically minded students of education to attempt to take the basis of curriculum-making out of the realm of individual judgment. They have been experimenting of late with the criterion of social utility and especially with objective bases of selection. It was natural in the first rush of the movement, with the initial impulse to play with the new idea, that its disciples should have been carried to extremes. It cannot be doubted that many of our workers, even today, are dominated by the belief that only those facts, principles, and motives shall be taught in the school which can be utilized immediately and generally by a considerable proportion of our people. If perpetuated, this attitude will result in a mechanistic curriculum of the worst sort. This view is already serving to make uncritical workers overemphasize the skills and the factual knowledge of the curriculum.

THE GREAT GOALS OF EDUCATION
ARE MATTERS OF HUMAN THOUGHT AND FEELING,
BUT EVEN THEIR DETERMINATION IS PROFOUNDLY INFLUENCED
BY THE SCIENTIFIC STUDY OF SOCIETY

We can orient our discussion by pointing out a partial distinction between the determination of the purposes of education and the subject matter. The purposes of education, the great guiding outcomes, are ultimates of life. They are discovered by thought and feeling. They are personal, subjective, and individual. Society has evolved a system of creative thought and (on a less advanced plane) one of creative feeling. One of the chief contributions must be a clear orientation as to the outcome of education. The setting up of goals, therefore, is a matter

¹ For example, Herbert Spencer's emphasis on "Science" in his famous essay.

of judgments, of the best judgments we can find. It is, however, a matter of judgment framed by minds confronted by a particular social order. The judgment of the great minds of the meditative Orient, for example, will be very unlike that of the intellectual leaders of the industrial Occident.

Now it is of great importance for the curriculum-maker to see that the determination of goals for a given social order will be most soundly made only when he has at hand adequate knowledge and a deep and broad perspective of that social order. The task of stating the goals of education, therefore, is not to be consummated by an analysis of social activities alone. It will be aided by such an analysis, but must not be dominated by it. It will be achieved only by hard thinking and by the most prolonged consideration of facts by the deepest seers of human life. For the great bulk of our curriculum, therefore, the analysis of social activities will influence the judgment of frontier thinkers; but it is the judgment of the seer based upon the scientific study of society—not the mere factual results of social analysis—that will determine the more intangible but directing materials of our curriculum.

Social analysis tells us merely what techniques and what specific kinds of knowledge we should have on tap. For the basic insights and attitudes we must rely, as we do for the statements of the goals of education, upon human judgment. It is imperative, however, that we make use of only the most valid judgments. The forecasting of social trends, the perception of the focal problems and issues, and the connections underlying them, demand erudition and maturity of reflection that eventuate only from a prolonged and scientific study of society. To the frontier of creative thought and of deepest feeling we go for guidance as to what to teach.

The "Subject-Matter" Point of View of the Scientific Methodists

It is necessary to bear in mind that, although marked gains were achieved by the objective study of curriculum-construction, scientific analysis was carried on for three decades under the spell of what we have called the "subject-matter" point of view. The scientific methodists, like the administrators, regarded the curriculum as a definitely organized body of knowledge and skill to be allotted special amounts of time, to be learned from reading books and listening to lectures, and to be measured by the recitational-giving-back-on-demand to the teacher. This is shown by such facts as these:

- The experiments in learning and in curriculum-reorganization were largely carried on within the framework of specific school subjects. There was little or no questioning of those school subjects.
- 2. The outcomes of education were stated in terms of specific skills and items of knowledge which were acquired within these subjects—for example, arithmetical, handwriting, and spelling skills, the facts of location, the time facts of geography and history, and the facts of the physical and natural sciences.
- Tests and scales were designed definitely in terms of these "subjectmatter-set-out-to-be-learned" outcomes.
- 4. A widespread tendency existed among the quantitative workers of not stating explicitly the assumptions and other backgrounds of their work.
- 5. Many of the leaders took no part in the critical discussion of educational theory; in conspicuous instances they refused to include such critical discussions of theory in the offerings of graduate schools of education.
- 6. The preponderant emphasis was upon the study of administrative problems of rearrangement. As a single illustration note the assumption underlying scores of investigations of the relation between school efficiency and size of class namely, that specific skills and items of factual knowledge are the real outcomes sought in school instruction.

7. The quantitative workers in education carried on, aside from the measurement of "intelligence," very little measurement of such generalized traits as the powers of organizing material, of organizing people, of taking part in group activities, of appreciations, general insights, and the like.

Assuming private capitalism, rugged individualism, and competition, the leaders of the mass-school carried the competitive climate into education as well as into family and neighborhood life, and into economic and social organization in general. Perhaps in the First Industrial Revolution it was inevitable that such an all-pervasive criterion of life and progress should have been implicitly adopted in the school.

But, pervading the work of the school, it was taken over explicitly into the quantitative movement in education by the almost universal adoption of the "rank-order method" of measuring every aspect of school administration and procedure. General excellence in school administration was measured by comparing one school system with another school system, one school with another school, one class with another class, one teacher with another teacher, one child with another child. Attainments, traits, abilities, and growth of human beings - as well as the attributes of school buildings, the educational budget, the allotment of the daily time schedule, the distribution of emphasis in the curriculum — were measured by comparison with outside norms. Thus the measure of the product or the growth of one individual was assumed to be those of other individuals, rather than his own capacity for production or growth. I am confident that the widespread use of this external norm of measurement has contributed to the setting up of false standards within the school as well as to the enhancement of the lack of integrity in the individual and to the widespread development of a climate of hypocrisy in the social order.

CHAPTER XI · IN RETROSPECT: THE FIRST CENTURY OF CURRICULUM-MAKING

This sketch of the past century of curriculum-making in the mass-schools constitutes our background for the study of the contemporary situation.

Our historical survey began with the statement that not once in a century and a half of national history has the curriculum of the school caught up with the dynamic content of American life. Decade by decade the curriculum has lagged behind the current civilization. Although the gap between the two has been markedly cut down in the last three quarters of a century, nevertheless the American school has been essentially static and academic. Today much of the gap persists. However, our survey has revealed conspicuous changes in the curriculum and in the techniques by which it was constructed.

Change in Purpose

In the first place there is the change in purpose. The theological orientation of the colonial Latin grammar school and of the early academies gave way to a half-century of "knowledge for knowledge's sake" and rigorous mental discipline. The disciplinary purpose of education, so all-persuasive in the latter half of the nineteenth century, was slowly displaced under the attacks of the dynamic psychologists by the fundamental principle of maximal child growth at minimal expense.

So today in America we find advocates of both the disciplinary and the growth function of the school. College and secondary instruction is still organized much more largely on the former basis than on the latter. It is in a small but increasing number of progressive public and private centers of educational reform, especially in elementary schools, that the curriculum is controlled more by child activity, spontaneity, creative self-expression than by conformity, regimentation, and unquestioning acquiescence. The desideratum in the work of the more eclectic reformers seems to be that of disciplined initiative, rather than chaotic freedom on the one hand or regimented conformity on the other.

Correspondingly the great aim of a tolerant understanding of and an active participation in contemporary life is slowly taking its place beside the fundamental creative one of growth through self-expression. Recently the dynamic psychologist has modified our thinking concerning the disciplinary functions of instruction. A generation of research has taught that training in tolerance, in generalization, must be given through the direct study of contemporary issues and problems and their historical development. The formerly prevailing conception of general mind-training through content remote from American life is being discarded.

Change in Leadership

This change in goals, in orientation, has been brought about primarily because of the change in leadership in curriculum-making. The end of the century is revealing the emergence of new types of professional curriculum-makers.

The past two decades have shown the manifold nature of the tasks involved in the preparation of the activities and materials of instruction for the great public-school system. The setting of ultimate and immediate objectives, the wise selection of content, the discovery of child interests and abilities, the adaptation of materials to levels of growth and to individual differences, and the organization of activities and other materials — all these jobs are difficult and can be managed only by those with definite training and experience. Curriculum-making increasingly has become a co-operative enterprise. Frontier thinkers, poets and other singers of American life, students of child learning and educational administration, and specialists in measurement and

experimentation must join hands with the students of subjectmatter values if the staggering problems of curriculum construction are to be solved. Already the foundations are being laid for the co-operation which will produce the new curriculum of tolerant understanding and creative self-expression.

Change in Method

Personnel determines procedure. The new point of view which is setting up child growth and intelligent understanding and participation in place of academic scholarship and mind-training is also beginning to utilize more scientific and unprejudiced methods. Educational classrooms are responding slowly to the demands of the laboratory spirit. In many centers the armchair is being scrapped. The critical eyewitness recorder of school activities is beginning to replace the armchair writer of scholastic textbooks. There is a growing willingness to try new types of materials in public schools, to experiment with new groupings of school subjects, to compare alternative procedures, and to depend more and more upon objective measurement of results. Advances are being made, even though but slowly.

Change in Content

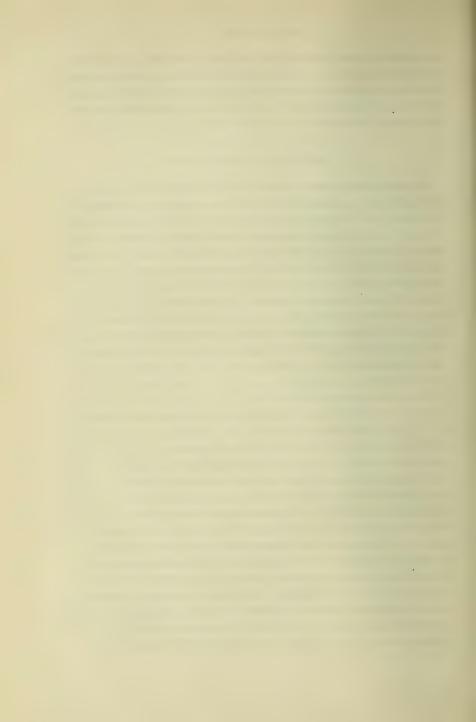
The new procedures and the new vision are steadily cutting down the lag between American society and the school curriculum. The subservience to morphology, to the very ancient past, to the classical, to the academic, is beginning to be replaced by a dynamic interest in contemporary life. Hundreds of schools do give courses in "problems of democracy," even though the instruction is reserved for only those few who remain in school until the last year of the high school. An increasing number of schools do discuss how people live together and how they are affected by their physical and natural environment. Every year sees a larger area of the nation throwing off the worship of British Victorian literature and utilizing in its place the indigenous writings produced by a growing American culture. Nevertheless,

even when viewed in the perspective of a hundred years of development, progress toward the development of a dynamic school curriculum is slow. If for no other reason than to speed up the process, we need to master a vivid historical perspective of the movements of which we are now an active part.

Change in Organization

Although progressive change is clearly discernible in the purposes, personnel, procedure, and to some extent in content, the "subject," or "compartmental," organization of the materials of the school curriculum responds least easily to the demands of the times. Teaching in the mass-school is still badly hampered by the barriers between the school subjects. Learning is still inhibited even more than it is promoted by the network of pigeonholes into which the materials are classified. Although some beginnings have been made in the direction of merging school subjects into broader and more integrated courses, hundreds of thousands of educational workers are not yet persuaded to ignore conventional subject divisions in the creation of a new and effective departmentalization of materials.

The direction in which we are moving, however, is clearly toward a new synthesis of knowledge and a departmentalization of the curriculum which will consist of a few broad integrations of child activities, readings, pupil research, what not. Under the necessities of mass education and to guarantee smooth administration of class instruction, we shall continue to break up curricular materials into departments of knowledge. The tendency, however, is markedly in the direction of cutting down the number of departments and expanding the area covered by each. To discover the most effective boundaries of the new departments, we shall increasingly tend to experiment with unique schemes of integration, ignoring in this process the unproved academic subject divisions of the past. In this way, by actually sweeping away the barriers between related materials and activities, we shall advance toward that unified curriculum for which the reform movements of thirty years ago strove so valiantly.



Book Two

Education in the New Social Order



Part I

EDUCATIONAL RECONSTRUCTION IN THE GREAT TRANSITION



The First Epoch of Its Kind

THE WORLD-WIDE slump in business after 1929 aroused many thinking people to a realization of the true nature of the period in which we live. Whether for better or for worse, we who have come to maturity after 1910 are living in a Great Transition between two stages of the change from agrarian to industrial civilization. The first stage, with its roots in a thousand years of slow change, made its definite appearance in the later 1700's, was augmented quickly during the nineteenth century, and came to its close about the time of the First World War, 1914–1918.

The second stage, evolving slowly out of the first after 1900, was expedited greatly by the war and accumulated momentum swiftly in the 1920's. The financial crash which began late in 1929 changed conditions so drastically that today we all see what only a few had seen before — that we are moving into a new epoch in world history. We are now moving from the First Industrial Revolution, which some students call the Machine Age, into the Second Industrial Revolution, which current publicists are calling the Power Age.

Perhaps the most important idea to be grasped is that the stage we are leaving was the First Industrial Revolution. For the first time in man's history he had succeeded in making a highly productive economic system. Note the unique ways in which it was the first of its kind:

- 1. The first invention of efficient power-driven machines.
- The first central electric stations transmitting power over long distances.

- 3. The *first* vertical corporations, with their giant concentrations of capital, their mechanism of automatic, integrated, and interchangeable fabrication, standardization of parts and processes, and specialization of labor.
- 4. The first unhampered application of the concept of laissez faire in economic life. Given efficient prime movers and machines, men, for the first time, were really free to exploit, to exploit people as well as things.
- 5. The first attempt to organize the collective economic affairs of nations on a world-wide interdependent basis. As a result, six hundred million people are now dependent on the uninterrupted operation of a fragile world mechanism of specialized production and exchange, with fluctuating units of money, wages, and prices, and an intercontinental market based on widely varying national standards of living.
- 6. The first experimentation with the concepts of political democracy—notably those of government by the consent of the governed, freedom of movement, freedom of assemblage and freedom of speech, trial by jury, and the like.
- 7. The first experimentation with the concept of education for all the children of all the people.

We need not multiply cases. Our list documents sufficiently the initial character of the period of experimentation at the close of which we now stand. In these and in other ways the stream of events of the past two centuries constituted the dawn of a new culture. It was a First Day.

Ours Is a New and Changing Civilization

All this is a crucially important background for the development of American schools, as well as of those of all other industrializing nations. Because our times thus constitute a unique period in American history — indeed, in world history — educators must confront it incisively and critically. That is not an easy thing for us to do. We are so completely immersed in our culture that it is not easy to lift ourselves out of it and above it so that we can examine it critically in the long perspective of history. Nevertheless that is precisely what we must do.

If we do so view American civilization, we shall come inevitably to the conclusion that we are now living in a young and tentative and changing civilization. It is less than a century and a half since men first produced goods by power-driven self-propelling machines; communicated instantaneously around the world; lived in automatically heated and refrigerated houses; enjoyed sophisticated symphonic music; listened as a nation, en masse, to the message of a President; knew how to produce goods, govern men, regulate the size of a family, and the like. All these ways of living are new — so new that their total number of years would constitute no more distance on the time-line of history than would a razor mark on a meter-stick.

The Chief Characteristics of the Machine Age

As a First Day the process of change advanced by utterly unique economic and social trends. A new physical civilization was suddenly produced; but deeper-lying psychological problems emerged as well. These are the devastating social and personal problems with which we are confronted today. But to understand them and to devise solutions for them we must know the characteristics of the social trends and the human traits which propelled them. Let us note several which were typical of this first industrial and social revolution of modern times.

First, a Great Expansion. It was a period of expansion, of spectacularly rapid growth. Every phase grew at positively accelerating rates: the production of goods, the aggregation of populations and their concentration in urban communities, the radius of the market, horizons of communication and exchange, the interconnections of cultures, the time-beat and rhythm of urban life. All was positive acceleration.

The basic idea motivating the century of expansion was MORE! More people to buy more shoes, more houses, more food. More power stations, more factories, more cars. More goods to export to "backward" populations. No concept is more completely descriptive of this era of expansion than this one of positive acceleration.

Second, an Orgy of Building Things. The second characteristic of life in this era of expansion was its absorption in physical construction. Naturally the first stage of industrialization was an orgy of building. The economic system, and with it the school system, were quickly erected. Dynamic catchwords energized the struggle both with geographic conditions and with the native owners of the continent. Conquer and settle...Build...Construct... Make it big; make it stunning.

Moreover, these concepts of construction were given a patriotic nationalization. "America"—and all other new countries—must be built. There is not much time; so hurry. The good of the individual will be guaranteed by augmenting the wealth and power of the group. Hence build, build for the sake of the country.

Third, Undesigned and Uncontrolled Exploitation. The virgin continents, the cyclonic climate, the drives of human nature, and the pressure of hordes of immigrant newcomers, all contributed to a restless haste to get immediate profits. This was true in South Africa, in Australia, in America, in all the "new" countries. So everything in this earth was mined—the topsoil, the forests, the gold and the diamonds, the coal and the oil, the iron, the copper, and other metals. Everything in and on the earth was taken in a mad, unrestricted, and unplanned race for gain.

The period was an uproarious one of hectic trial and error—mostly error—and waste! The concepts of private ownership and free competition made design in the first era of industrialization utterly impossible. Although, even at the beginning of the debauch, thinking men counseled the imperative need for plan and social control, most of the energetic, shrewd, and ambitious men threw themselves into the race for money and power, and rationalized their conduct by the French economic philosophers' doctrine of *laissez faire*.

The Western man translated the physiocrats' dictum to suit his personal desires — "Freedom to exploit"... "Every man for himself, and the devil take the hindmost." And the devil did; that is, he took the rank and file of the people of the industrial countries.

Changes in the tempo of living in the rapidly industrializing countries paralleled those of the new mechanical occupations, transport, and communication. Faster and faster beat the basic rhythms of physical life. "Cutting down elapsed time" became an obsession of the man-in-the-street, as it had been of the pony-express riders of the 60's and as it is of the drivers of locomotives, automobiles, and airplanes today.

Neither thoughtful design nor contemplation was easy in such an intellectual climate. Mental life consisted of a succession of fairly obvious problems, each to be solved by impulsive generalization. Naturally thinking was for most men mere perceptual reaction. The inhibiting of impulse for moments of thoughtful choice between alternatives became a rare occurrence. Percept ruled over men's minds, and but few achieved the attitude of problem-solving and conceptual generalization.

I have named merely a few conspicuous examples of the propulsive concepts and attitudes and the guiding outlook of this First Day of industrial culture. It is not doubted that they produced remarkable physical achievements. But that they also produced baffling social and personal problems for us who live just at the dawn of the second industrial stage is equally clear.

The Machine Age Advanced into the Power Age, 1890-

Note quickly the manner in which the past forty transition years (1890–1930) were born out of the close of the first industrial stage. Because of many careful analyses of social change, we know now with some precision the approximate time at which one epoch definitely took on the shape of another. The most pronounced point of change was the short period of the World War, 1914–1918. In these years population curves reveal points of inflection, production curves rise more sharply, and man-hour measures of production change more swiftly.

There had, of course, been premonitions of the coming eco-

nomic and social changes a quarter of a century before in such new inventions as the automobile, wireless communication, the motion-picture mechanism, the electric generator, and the central power station; in the sharp changes in immigration; in the filling in of the last frontier in America; in the marked drift from farm and rural village to factory and city; and in the swift alteration of family, neighborhood, and community life and of long-established loyalties and allegiances.

From our vantage point of perspective today we can see that even if the First World War had been put off for another generation, the advance of social trend would have guaranteed that Western industrial peoples would have been awakened to find themselves in a new epoch by the 1940's. But the war, precipitated in 1914, enormously speeded up invention and technological advance before 1919. Moreover, it altered every aspect of industrial culture, piling up national and international debts, upsetting the relations between interdependent peoples, dislocating markets, currencies, and popular faiths, and slowing up the march of political experiment.

Meanwhile, in the research institutes of the great corporations, invention was subjected to the methods of mass production, and technological efficiency advanced by great strides. Every phase of the economic system was speeded up — the energy-converting power of engines; the integration of power, machines, and processes in automatic factory production; the productiveness of human labor, and hence the permanent displacement of workers. Even during the prosperous 1920's there were never fewer than 2,000,000 unemployed workers in America. Competition for jobs became fiercer, and standards of living turned downward once more. Increasingly the bargaining power of the owner and the employer was enhanced, but the worker lost control over his job, his wages, his standard of living, and his craftsmanship.

Then came the well-known events of October, 1929, the crash of the financial house of cards and the shock to the economic mind of the nation. We have no space, and there is no need, to rehearse the manifold physical and psychological effects which followed upon these shaking happenings.

But one result is of far-reaching importance — namely, that the dazed awakening of a thoughtful minority from the fantasies of the previous decades led to the vigorous launching of new scientific studies of industrial culture. The signs of the depression had scarcely revealed themselves before a brigade of students of the economic-social system began producing new analyses of it. In 1930–1931 a whole library of criticism and protest prepared the way for many careful studies and "plans" for a controlled economic system. The latter came from the pens of publicists, economists, historians, chambers of commerce, captains of industry, labor leaders, bishops of the churches, presidents and faculties of colleges.

A new body of creative students entered the sociological laboratory. Engineers, ousted from their professional work and free of the academic blinders of classical thought, graphed economic history and fitted equations to the curves of the trend. World-renowned scientists applied their concepts of energy and life and their scientific methods to the study of the economic system. Thus the current years have launched what promises to become the most creative period in the history of modern thought and social organization.

We see clearly, then, that we no longer are living in the placid days of the elder Roosevelt, McKinley, or Taft, when "problems" meant the best method of conserving the forests or eliminating graft from the rivers and harbors commission. Nor are we in the anesthetized getting-something-for-nothing era of Harding, Coolidge, and Hoover. On the contrary, we stand at the verge of a new epoch, an epoch loaded with danger to our physical lives and to our most precious institutions. In a world of potential plenty, in which many millions of American families are confronting physical starvation and spiritual deprivation, a magnificent production plant is being fettered by a despicable distribution system. Worse yet, we stupidly refuse to let the production system operate, because we withhold the necessary munificent flow of purchasing power from the eighty million adults who must buy its products in order to keep it going. Moreover, the tension is not merely local, confined to the boundaries of the United States; it is world-wide. The entire international mechanism of production and exchange is marked by it, and the problem becomes intensified daily by a vicious and artificially stimulated and competitive nationalism.

The Contrasting Characteristics of the Power Age

As a consequence, it has been made clear to us that today we are caught between two stages of economic and social change. These stages are, at bottom, very different. A few contrasting characteristics will illustrate the difference and will set the chief cultural problem which our generation must solve.

First, whereas the first epoch was one of expansion, of positively accelerating growth, the second is to be one of consolidation. We must now take thought; we must design an economic and social system which will work. In this task educational workers must play an important part.

Second, the orgy of sheer physical building is over. The major part of the economic system is erected. We have passed out of the wasteful Machine Age of crude steam engines, slipping belts, and creaking pulleys and gears into the Power Age of efficient giant generators, long-distance power transmission, and automatic, continuous, straight-line-process factory production. The implications of this for thinking men are clear; they cannot deal with the problem of the new day using the ideas and attitudes of the old one. For example, we no longer live in a regime of scarcity; we have already passed into the day of potential plenty. For the first time in the world's history man, in America, can now produce a civilization of abundance for all. Our modern language and thought must from now on show that we know this, and our educational design must show that we know it, too.

Third, the initial exploitation for immediate private profit and personal aggrandizement of the first epoch must give way, in the second, to designed and controlled production for the total group. Our new era of plenty is only a potential, not an actual

one. To bring it into existence will require the building of a distribution system co-ordinate in effectiveness with the production system which has already been erected. But to do that in a democratic society many minds must be made aware of the necessity of deep-running changes in the ownership and operation of basic utilities and industries.

That is, new problems of social control now confront us, and to deal with them we must build a new language of thought and discussion. For example, in a regime of the initial exploitation of virgin continents, the concepts of laissez faire, of success via competition, were useful, perhaps indispensable. But our regime today is very different: it is one, first, in which an efficient production system has already been erected; second, in which there is no longer any relation between what a worker can produce and the share of the social income which society can pay him as purchasing power; third, in which it is increasingly evident that profits and fixed charges take an undue proportion of the social income; fourth, in which personal competition interrupts the operation of the system and withholds much of it from use. In such a regime, I say, the concepts of scarcity, laissez faire, private ownership and control of basic industries and utilities, constitute the vocabulary of a foreign and useless language.

Fourth, as a final illustration, we must note that intellectually and spiritually also the second industrial age is new. We have moved from an epoch which demanded action and percept above all things into one in which design and realization are possible.

The rehearsal of our conspicuous economic and political difficulties reminds us that two staggering social problems confront America and every other industrial country. There is, first, the problem of redesigning and rebuilding the economic-social system, and there is, second, the co-ordinate and basic problem of developing an informed, thinking citizenry which will guarantee that this reconstruction will be done with the consent of the governed and under the orderly processes of democratic government.

The redesigning of the economic system is the task of the scientific students of society, that is, the economic and social

engineers; but the building of an informed and thinking citizenry to guarantee that the new plans will be put into democratic and efficient operation is the task of the educators — the educational engineers of the country. These problems must, however, be attacked concurrently, or as nearly so as possible. We cannot wait for the solution of one before we begin to work on the other. The social order which our fathers built is collapsing about us, and we must rebuild it. Yet we must rebuild it strut by strut, even while it collapses; for in our complex interdependent world we cannot pull the whole structure down and build from a new foundation upward. To do so would endanger the lives of hundreds of millions of human beings.

WE SEE, THEN, THE SIGNIFICANT ROLE OF THE EDUCATOR

To sketch briefly these sharp contrasts between the two epochs is to set one of the chief creative tasks of our transition years. That is the psychological problem of clarification. The passing of an epoch inevitably produces chaos and bewilderment. So it is with our current years; they are essentially years of drift, of lack of direction, of confusion of problems, of ends, of next steps. Hence the dire need is for clarification — clarification of trends and factors, of problems and ends; clarification of alternative courses of action, of probable consequences, of loyalties and allegiances.

But for the clarification of meaning a new language is needed. The problems of the coming years simply cannot be thought about by using the ideas and methods of thinking which dominated the mind of the first stage of industrialism. New ideas and principles must be found to fit the new situations. A new orientation, born of the current trends, is demanded. We are confronted now with problems of articulation in a period in which the language of our childhood must be discarded and a new one devised. And that will prove to be one of the major creative tasks of educational workers in our Great Transition.

Social and Educational Reconstruction Must Go On Together

Finally we see that the necessity of attacking both our sets of national problems at the same moment enormously complicates the task of the educational engineers and workers. They must not only design a new system of education appropriate to a new social order; to do that they must also understand the major outlines of the problems involved in designing the new economic-social system itself. Without such knowledge they cannot build a sound program of education. As we have said throughout the previous chapters of this book, the program must be designed out of the modes of living and the problems of the people. In our transition years this means that the new education must be built upon the unsolved problems and unpredictable trends of a world in tumult and chaos. Thus an almost overwhelming burden is put on the educational workers of the world, for they are now compelled to project optional solutions for an indeterminate turgid future.

Moreover, the fact that the long-despised "teacher" is called to a truly revolutionary role in the modern world is thrown into bold relief. He must not only bring his program of education up to date and eliminate the lag between school and society; he must, in addition, bring up a generation of young Americans (and most of their elders too!) who will understand the validity of proposed steps toward reconstruction. Thus his supreme function in our times of social crisis is leadership in the scientific study of society. In our current civilization this is a role marked by great danger and risk. To adopt it in such times of emotional strain the educator must keep a decently objective attitude, resisting the lure of economic and political panaceas and giving his heartfelt allegiance only to a willingness to follow the facts, wherever they may lead him. This course will in many instances bring down upon him the anger of various powerful and selfish groups in the collapsing social order.

Nevertheless educational workers must now make the great decision and take whatever risks follow upon it, for the solution of these problems of social and personal design can be achieved only by means of a thoroughly new educational procedure. Western peoples, at least a considerable minority of them, must learn how to combine efficient technological operation with democratic control; how to establish government by the consent of the governed through education in tolerant and critical understanding; how to develop interest and ability in creative labor; in short, how to apply the scientific method to the problems of men living together.

But, I repeat, to consummate these things under a democratic form of society — and any other form is totally repugnant to most of us — our only recourse is education. As we stand at the end of the first industrial epoch and at the beginning of the second, our problems, both social and personal, are educational ones. New minds are to be created. New personalities are to be brought forth. A new orientation to life is to be developed. A new language of thinking and discussion is to be evolved. But these are all products of education. They can be brought forth if many of the people think seriously about their society and their personal lives.

CHAPTER XIII · NEW CONCEPTS FOR A NEW EDUCATION

FORTUNATELY, as we approach the gigantic task of building a new education for a new social order, we do not start from scratch. Our fathers passed on to us more than staggering social problems to solve. They bequeathed us an important body of knowledge and theory as well. The period of the great expansion, 1870–1900, produced the forerunners of a fine brigade of creative students of American life and education. As a result of their labors the period of swift transition since 1900 has produced a vast amount of experimentation and progressive educational practices. Our next task, therefore, is to study the work of these pioneers of the new education and the chief concepts upon which that work was based. Since the impetus for their ideas and experiments sprang from certain movements outside of education, let us first remind ourselves of those.¹

Three Revolutionary Ideas

There was, as every student of history knows, a striking advance in the use of the scientific method of thought in analyzing and describing the natural world and in the study of mind and human relations. The antecedents of the movement lay in several centuries of the slow invention of measuring instruments, the development of a mathematical method of treating data, and the analysis and classification of "the sciences." Even before 1800 some students were applying the scientific approach to the plant and animal world, and were deriving hypotheses

¹ Some of them are more fully described in my Culture and Education in America (Harcourt, Brace and Company, New York, 1931), Chaps. VI-VII.

concerning the origin and growth of organisms. Such workers as Erasmus Darwin discussed vigorously the theory that "the world has been evolved, not created. It has risen little by little from a small beginning."

Erasmus Darwin's grandson Charles (1809–1882) grew up in such an intellectual climate, and in the year 1859 published *The Origin of Species*, a record of twenty years' laborious attempt to document the hypothesis of evolution. There followed what Bernard Shaw has called the "infidel half century" of research and debate. Investigators applied the scientific approach to the physiology, neurology, endocrinology, psychology of the human being. By the turn of the twentieth century they had accumulated a vast body of documented evidence in support of three revolutionary ideas.

I. THE CONCEPT OF GROWTH

The first was the idea of growth. Both individuals and societies came to be conceived of as growing organisms, not as "created whole" by some otherworldly force. All life was regarded as growing, and growth was continuous from birth to death. As John Dewey put it: "Since growth is characteristic of life, education is all one with growing; it has no end beyond itself.... Growing is not something which is completed in odd moments; it is a continuous leading into the future."

This concept of life as growth, then, gave pioneer psychologists and educationists their cue for the reconstruction of their ideas of child learning and the development of the curriculum. Increasingly education came to be visualized in terms of growth—physical, intellectual, emotional, moral. The criterion of excellence of an educational system was Does it produce a constant tendency toward maximum growth?

To appreciate the full significance of this concept for education, however, we must understand two other correlative ideas. One is the idea that meaning grows through the active response of the individual. The other is the idea that both in structure and in behavior the human being is a whole, an integrated organism.

2. Peirce, James, and Dewey: THE CONCEPT OF THE ACTIVE CHARACTER OF EXPERIENCE

This idea had been perceived periodically by many students of earlier civilizations and previous centuries. But in the milieu of the scientific documentation and discussion of the growth concept, it was rediscovered and clarified as never before in recorded history. Although many Europeans and Americans made contributions to its understanding, three clarified it more than all others—Charles Sanders Peirce, William James, and John Dewey. Peirce, son of Benjamin Peirce, noted Harvard mathematician, himself achieved world-wide recognition in mathematics and the physical sciences. By the 1870's his interests turned to psychology and philosophy, especially to the problem of how ideas are made clear. For thirty years he struggled with this and other fundamental ideas and succeeded in stating a whole new conception of how the human mind "gets meaning."

But it was by influencing the two younger men — James and Dewey — that he affected education. William James, a lifelong friend of Peirce, was not only a brilliant student of psychology and philosophy; he was a masterly writer as well. In 1890 he published his two-volume *Principles of Psychology*; in the years following, *Psychology: Briefer Course* and a simpler *Talks to Teachers on Psychology*, which were read by laymen as well as technical students in many parts of the world. Through his concrete examples of behavior and his dramatic style the "new psychology" was passed on to tens of thousands of teachers.

Central to his theory, as well as to Peirce's, was the concept that meaning is built up through active experience. The thesis was brilliantly illustrated that "education is for behavior and habits are the stuff of which behavior consists." The concept of active learning was generalized recurringly by such a statement as this:

Experience is never yours merely as it comes to you, facts are never mere data, they are data to which you respond, your experience is constantly transformed by your deeds. . . . The simplest process, the most elaborate scientific theory, illustrates how man never really finds, he always co-operates in creating his world.

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The third of the American thinking men of the great expansion. John Dewey, was profoundly influenced by both Peirce and Tames. But although oriented greatly by them, he went beyond them in the analysis and description of how meaning grows, how ideas are made clear, how we think. Moreover, we must remember not only that he has been our greatest student of the theory of behavior and thought but also that he was one of the two original American pioneers in practical school experimentation. It is not an exaggeration to say that the founding and experimentation of his laboratory school in Chicago, 1896-1904, and the publication of his famous essays The School and Society and The Child and Curriculum determined the character of the educational revolution of our current transition period. I will describe his part in the founding of laboratory schools in the next chapter. At this point, to set Dewey's elaboration of the action-concept in a broader background. I summarize six fundamental ideas that he explored and described for educational workers in the quarter-century following 1895.

First, knowing comes only through active response; meaning arises only through reaction.

Second, human experience is unified and continuous; there are no separate instincts; ends and means, character and conduct, motive and act, will and deed—all are continuous; hence all dualistic interpretations of experience are fallacious. (In essence the "integration principle.")

Third, knowing arises through testing consequences.

Fourth, experience consists primarily in the adjustment and interaction of individuals; both individual and group understanding and behavior are the product of the social human environment; the social environment "consists of all the activities of fellow beings that are bound up in the carrying on of the activities of any one of its members." (The basic concept of our current social psychology; see Chapter XVI, "The Individual and the Culture: Social Psychology.")

Fifth, society is conceived of as a democracy built on the foregoing principles — that is, on the experimental method of knowing, the dynamic unity and continuity of experience, "numerous and varied points of shared common interest."

Sixth, an educational system, also based on the foregoing concepts, which will give "individuals a personal interest in social relationships and control and the habits of mind which secure social changes without introducing disorder."

Meaning, Therefore, Grows through Cumulative Reactions

Basic to all these important ideas is the first, "Knowing comes only through active response."

Following Peirce, James, and Dewey, educational workers could build their practical programs in the twentieth century on the principle that meaning arises out of the active experience of the individual and that experience is a continuous stream of minute, complicated, integrated responses. Learning is making responses. We respond actively, with meaning; we do not passively "acquire" meanings, by some mysterious process, from the environment about us. We have a meaningful experience only when the organism makes an appropriate reaction. The educator can bank on this, then — the learning child is the active child.

Consider a genetic example — how the infant learns a concrete meaning like "ball." From his first contact with it all his sensibilities enter into the building of meaning. He learns to hold the object in his hands, making the appropriate physical adjustments of muscles and joints. Eventually many tactual reactions, integrated with the response that his eyes make to the shape, bring him to express and to understand the meaning of "round." This meaning is increased by noting that the ball not only fits into the curved hand but that it also can be rolled on a smooth surface. Other perceptions—resulting from squeezing, patting, and the like—lead him similarly to react with meanings of "hardness" and "softness." As he becomes older, "ball" becomes to him something that can be thrown, batted, and caught, or knocked about on a tennis court, a golf course, a pool table.

Thus, through countless varied experiences and over a considerable interval of time, the growing child learns to fuse to-

gether a multitude of reactions with the single symbolic meaning "ball." He learns to say the word and to write it, as well as to think it and to feel it. This is achieved only with the co-operation of the adults about him who give him the word and who teach him variations and possibilities of response which would not occur to him in solitary play. Thus by an active, inductive, cumulative process a background of experience — a stock in trade of meanings — is built up.

3. The Concept that the Whole Organism Contributes to the Response

But responding with meaning is an integrated process as well as an active one, and the adequacy of the meaning will depend upon the appropriateness with which every trait enters into the total response. This is the third idea that was made clear by a half-century of research following 1870. We today owe our understanding of this fundamental concept to two groups of students. One included the theoretical philosophers and psychologists, led by Peirce, James, and Dewey. The other, working independently of these, were laboratory students of physiology, endocrinology, neurology, and psychology. These included such leaders as Walter B. Cannon, C. S. Sherrington, G. W. Crile, C. M. Child, Wolfang Köhler, and others.

From the cumulative theories and laboratory studies of these two groups of students has emerged an understanding of the "integration principle" of human behavior. According to it, clear meaning arises, not only through the active response of the individual, but, in addition, only when the various aspects of the response are appropriate to one another. Physical and mental attitudes must fit the intellectual meaning. Facial expression, bodily posture and movement, gesture, idea — all are related parts of the total unified response. In expressing an attitude of fear, for example, the body tends to assume a posture of recoil. Corresponding physical attitudes and movements form the bodily carrier of the meaning; the muscles and joints tremble, become tense, perhaps collapse; the body may be projected into overt

movement. A person conveys an attitude of delight by an advancing, or "going out," posture. In anger the fists are clenched, the teeth are set, and the body becomes rigid.

Thus we respond with adequate meanings only insofar as we adopt the physical and mental attitudes and use the verbal symbols which can produce those meanings. The body may not be seen to move, but the tendency to make appropriate physical adjustments is there. These physiological adjustments, these mental-motor sets of the individual, we call "attitudes." It is now believed that attitude is the, or one of the, essential carriers of meaning.

The principle of integration reveals itself in a multitude of ways in our daily behavior. Note, for example, how we tend to pitch our voices in terms of the meanings of the social situation to which we are reacting. In addressing a small animal or a little child, or in telling an anecdote "about fairies," we tend to speak in a high-pitched, thin voice; but a description of a giant or a large animal is given in low, deep tones. Similarly terms of endearment bring their corresponding physical and facial gestures of affection.

This fact of the unified, organic nature of human response is illustrated by negative as well as positive examples. To do otherwise than to correlate physical gestures with intellectualemotional meanings causes intense strain on the organism. Note, for example, how difficult it is, in learning to play a musical instrument, to use a legato touch with one hand and a staccato touch with the other. Practice is necessary to fix attention deliberately upon one hand and one set of co-ordinations and temporarily to neglect the other. Magicians likewise are compelled to practice hours without end in order to master the intricate, special co-ordination required in those acts of legerdemain in which one part of the organism is given a special task unsymmetrical with and un-co-ordinated with the tasks of others. The acrobat in the circus or on the vaudeville stage compels himself to practice the abstracting of certain hand and eye skills in order to break down the tendency toward symmetrical behavior by the various parts of the organism. If a more practical and humorous illustration is needed, recall from the parlor games of our child-hood such examples as patting the head with one hand while rubbing the stomach with the other. These examples illustrate not only our tendency toward symmetrical behavior; they illustrate also the tendency toward integrated behavior on the part of the whole organism.

Scientific Evidence for the Principle of Integration

So much for the practical illustration of the integrated nature of the organism and of human response. The principle of integration is founded, however, on a vast body of researches in the fields of psychology and physiology, extending well over half a century. It is not too much to say that current interpretations of the physiological foundations of human behavior are based more thoroughly upon this principle than upon any other.¹

Research in endocrinology, the exploration of the constitution and role of such organs as the thyroid and parathyroid, adrenal. pituitary, and pineal glands, has been one of the most fruitful lines of study. Even before 1800 physiologists had located the thyroid gland in the neck and the adrenal glands in the abdomen. but they did not know what functions, especially general organic functions, such glands exercised in physiological, mental, or emotional life. About the middle of the nineteenth century, however, the part played by these ductless glands in the emotions and in the general physiological behavior of the individual was revealed by a slowly accumulating body of evidence. With their successful transplantation of the reproductive glands under the skin of animals, for example, it was proved that these had definite powers over the body as a whole, attributable only to the internal gland secretion. Gradually they established such relations as that between a diseased condition of the thyroid gland and the weight and height of individuals. By the time of the 1890's many direct relations between the condition of the thyroid,

¹ Note, for example, the manner in which Professor C. M. Child organizes his entire interpretative work entitled *Physiological Foundations of Behavior* (Henry Holt and Company, New York, 1924) around the integrative principle.

pituitary, and other glands and the emotional and physical health of individuals had been scientifically established.

Shortly after the beginning of the twentieth century scientific physiologists began to study systematically the action of the digestive organs under various conditions of emotional stimulation. In 1902 the eminent Russian physiologist Pavlov conducted his famous experiment in the "sham" feeding of dogs, in which he showed that the secretion of gastric juices is a true psychic function. In this country Professor Cannon and his research associates at Harvard were establishing the relation between unfavorable emotion and the condition of the digestive juices. They showed, for example, that emotional hysteria in animals invariably evoked in them not only fear and rage but an increased adrenal secretion in the blood; under conditions of pain and other intense emotions there occurred a marked increase in the sugar content of the blood. These results they confirmed by experiments on human beings.

Furthermore, they showed that by injecting adrenalin into the blood stream an individual's fatigued muscles were quickly restored. In 1890 William James had concluded from his empirical observations that emotional excitement has an energizing influence upon the entire organism; "reservoirs of power are developed by emotion," he said. Sixteen years later Sir Charles S. Sherrington, in a famous monograph, The Integrative Action of the Nervous System, scientifically documented James's hypothesis that it is "the emotion that moves us."

These investigations confirmed the long-noted influence of emotional excitement upon physical endurance in various religious rituals, such as those of the Holy Rollers and Holy Jumpers, the American Indian ceremonial dances, and the Haiti Negro "voodoo" rites. The religious fervor of these zealots often sustained them without food, rest, or sleep during several successive days and nights.

Thus the chorus of emphasis by physiologists on the "wholeness" of an organism's response has increased steadily during the past generation. The point of view can be summed up in J. S. Haldane's description of metabolic activity as a "whole" process:

Such processes as secretion, absorption, growth, nervous excitation, muscular contraction, were treated formerly as if each was an isolable physical or chemical process, instead of being what it is, one side of a many-sided metabolic activity of which the different sides are indissolubly associated.

Other physiologists and physiological psychologists have made "integration," or "organization," the very crux of their interpretation of behavior. Gradually the psychologists, even the behaviorists, came to adopt the same view. Witness John B. Watson's statement "The behaviorist is interested in integration and total activities of the individual." The psychobiologist also treats the individual as "whole personality."

We need not extend our catalogue of cases or scientific studies any farther. Those which have been given provide convincing documentation of the principle of the whole individual in action. Our educational reconstruction must be based upon it.

Here, then, were three new concepts for a new education:

- 1. The concept of life and education as growth.
- The concept of meaning through active response; growth as the continuous reconstruction of experience.
- The concept of the human being as an organism and of his responses as integrated.

Although others of importance were explored during the creative decades of our Great Transition, these three were the essential basis for the new educational experiments.

The Struggle of Two Opposed Educational Theories

We can now see in clear juxtaposition the two opposing theories that have contended for educational supremacy during our transition years: the doctrine of discipline and the doctrine of growth. Corresponding to those doctrines two groups of workers were active among laymen and professional school people. Of course the contest had an ancient history. During centuries of earlier innovation such "reformers" as Comenius, Rousseau, Pestalozzi, Herbart, and Froebel had pointed out that educational systems have always tended to set up a conflict between adulthood and child life, between the logical and the psychological, between control and freedom, between iron rule and spontaneity. But never until our own generation was there such a vivid picturing of thought concerning the agelong conflict. Industrialism, with its vast machinery for the dissemination of ideas, its cheap and voluminous print, its mass education, and its elaborate training of teachers, greatly facilitated the discussion.

As a result, the conflict rages today, and is made especially vivid by the expansion of our pedagogical vocabulary. Witness the prevalence in our contemporary educational literature of "interest versus effort," "order versus chaos," "subject matter versus child's experience," "habit-forming versus expression." The two extremes are represented by schools and school systems which are real "going concerns" in our educational order.

There are those, on the one hand, who would have a curriculum made up of formal, carefully organized subjects of study, systematized lessons, rigorous examinations, set practice exercises. and recitations. And there are others who visualize the curriculum as a stream of child activities, not broken up in any systematic manner into "subjects," and growing out of the spontaneous interests and the personally felt needs of children. The former are concerned lest children grow to adulthood without adequate grasp of what the human race has accumulated; hence their emphasis is upon thorough training in logical thinking, upon law, upon systematization of thought. The bulk of the textbookwriters and school and college administrators belong predominantly to the former of these schools; hence the strangle hold of algebra, Latin, ancient history, physics, chemistry, and biology all of them "subjects" represented by carefully "systematized" bodies of printed materials and logically organized methods of teaching.

The Increasing Acceptance of the Concepts of Growth and Active Integrated Response

But the regimentation of the public-school system set up by the formalists is being broken down in our generation by the successful efforts of two groups: the students of the scientific approach in education and the advocates of a more child-centered education. We shall turn to the contributions of the latter in the next chapter. I am convinced that both groups, although representing very different backgrounds, strive for the same end. The leaders of both groups recognize two factors in the educative process: on the one hand, the child, a bundle of undeveloped capacities, of dynamic tendencies toward activity, dependent upon his environment for the proper stimulation for growth; on the other hand, American civilization, a body of economic, political, and social institutions, toward which, so far as an individual is a social being, growth must proceed. They see these institutions as an intricate array of ideals, purposes, guiding concepts, principles, expressions of the artistic impulse, standards of beauty. They recognize the task of curriculum-making as a task, first, of organizing activities and materials for the development of a fine understanding of and participation in our new civilization; second, of bringing the child into contact with this civilization in such a manner that he will gradually grow in maturity of understanding of the contemporary institutions, in tolerance for current issues and problems, and in effectiveness of expression.

But the fundamental criterion of success in curriculum-making, according to these two groups of students, is the growth of the child. This standard has been sponsored almost not at all by the subject-matter specialists—indeed, only to a slight extent by the "scientific educationists" (whose minds, as we have just seen, have been much concentrated of late on their techniques). But for three decades it has been the central criterion of an increasing number of the "progressive" schools. To a brief historical sketch of their theories and practices we now address ourselves.

CHAPTER XIV · THE BEGINNINGS OF CHILD-CENTERED EDUCATION IN AMERICA

The Pioneer Work of

Colonel Francis W. Parker in Curriculum-making

IN 1875 Colonel Francis W. Parker, successively a district teacher, principal, and superintendent of schools in New England, and a distinguished officer of the Federal army in the Civil War, was invited to become superintendent of schools in Quincy, Massachusetts. Following the close of the Civil War, Colonel Parker had spent three years in the University of Berlin, Germany, in graduate study.

In five spectacular years at Quincy the conventional and artificial school curriculum was markedly vitalized. There was less emphasis upon the memorization of the facts of textbooks and more upon the study of real things. Lessons in science and geography were based upon firsthand observation out of doors. Reading became an exercise in the acquiring of meanings, rather than in the learning of the techniques of oral pronunciation. The schoolroom became a pleasant place of activity. Teachers were brought into the reorganization of the materials and methods of instruction. A central place in the whole curriculum was given to geography and nature study, "and the sand table in the schoolroom and the sand piles in the school yards were extensively used in the development of concepts of structure." The skills were taught in connection with other subjects, and language usage took the place of formal grammatical analysis.

Great enthusiasm for the methods of Colonel Parker and his associates developed among the educational liberals of the country. He served as one of the assistant superintendents of the schools of Boston from 1880 until 1883, at which latter date he was elected principal of the Cook County Normal School (now the Chicago Normal College). For eighteen years, under his leadership, that institution was a great storm center of educational reform.

During the five years at Quincy, summer schools and institute classes had developed for the training of teachers in the use of the new content and organization of materials and in the new methods. The same thing happened on a larger and more organized scale in Chicago, where a kindergarten and an elementary school for practice teaching were maintained from the outset as an essential element of the new system.

Colonel Parker built up in the Cook County Normal School a faculty of experimentalists, of fearless innovators, real students of childhood, and a practice school which proved an influential object lesson for both teachers and the general public. From beginning to end his mind was upon the production of a higher quality of teacher, and hundreds of young men and women were attracted to the Chicago Normal School by the new regime. The school became a national pedagogical center. The entire work of the practice school was concentrated through experiments and investigation on the work of teaching. It was a great innovation and antedated the schools of observation and practice in other institutions.

Perhaps the central doctrine in the curriculum-making of Parker's group was the Herbartian principle of correlation and concentration. He and his Herbartian colleagues saw the growth of the child, especially character-building and intelligent citizenship, as the aim of education. In the early discussions of the National Herbart Society 1 Parker constantly reiterated that the child was the correlating center of education, not "history," not "nature study," not "geography," or any other subject. He persuaded his entire faculty to unite in the attempt to construct a "course of study" in which the elements of subject matter would be correlated around one great theme—namely, that of effective

¹ Now the National Society for the Study of Education.

² See especially the first and second yearbooks of the National Herbart Society, 1895, 1896.

citizenship and community life. The one question which he asked in selecting subject matter was "What knowledge does this class need for its present life?"

Thus it can be seen that Parker was aiming at the same goal as those who today are trying to build up a new synthesis of knowledge. He and the Herbartians were one in their aim of unification of the compartmentalized organization of the subject matter of the curriculum, and, in carrying out their aims, they both attempted to reach this goal by correlating existing subjects of study.¹

Parker and the Laboratory Schools of The University of Chicago

In 1899 Mrs. Emmons Blaine gave Colonel Parker one million dollars to endow the Chicago Institute,² a private training school for teachers. It was her aim that he should have an opportunity to develop his work free from political turmoil and unhampered by the conventional and financial limitations of a public normal school.

There was delay in the erection of the new building. Meanwhile, therefore, President William Rainey Harper of The University of Chicago suggested the inclusion of the institute within the university campus and the fusing of it and three other institutions into a school of education under Colonel Parker's directorship. This plan included, besides the Chicago Institute, the Dewey Laboratory School (founded by John Dewey in 1896, with Mrs. Dewey as principal, as the laboratory and experimental school for the university department of education and

¹ The facts of this statement are from "An Account of the Work of the Cook County and Chicago Normal School from 1883 to 1889," written by Colonel Parker in the summer of 1899 after he had left the Normal School and had become president of the Chicago Normal Institute, and published in the Elementary School Teacher and Course of Study, Vol. II, 1902, p. 752. See also the first five yearbooks of the National Herbart Society, 1895–1899.

² The facts concerning the Chicago Institute and the development of the School of Education at The University of Chicago have been supplied in part by Miss Katherine Stillwell, a teacher in the School of Education from its beginning.

philosophy, of which he was head), the South Side Academy (a private preparatory school for the university, established in 1892 and managed by Dr. W. B. Owen), and the Chicago Manual Training School (fostered by the Commercial Club of Chicago), with Dr. Henry Holmes Belfield as its head.

The plan was put into operation in 1901, but in the course of the first year Colonel Parker died.

The Impetus Given by the Work of John Dewey to the Child-centered-School Movement

Dr. John Dewey succeeded Colonel Parker as director of the School of Education of The University of Chicago in 1902. Dewey for years had been active in university departments of philosophy. Upon his connection with The University of Chicago in 1894, however (which was also the year of the founding of the university), he became head of the department of philosophy and education.

The years from 1884 which he had spent in the philosophical field gave him a broad perspective of the role of the national educational system in the American scene of 1895 to 1905. His theories developed around the same nucleus of life activities that had served as the orienting center of Parker's work. Indeed, Parker's first syllabus of his training course for the new School of Education ² credits Dewey with being one of the half-dozen forces operating in the educational situation of the time.

Dewey displayed a catholicity of interest. In 1894 he published his "Interest as Related to Will" in the First Yearbook of the National Herbart Society. In 1896 the supplements of the National Herbart Society discussed the fundamental principles of the reorganization of American education. His essay which

¹ John Dewey (1859—), instructor and assistant professor of philosophy, University of Michigan, 1884–1888; professor of philosophy, University of Minnesota, 1888–1889, and University of Michigan, 1889–1894; professor and head of the department of philosophy and education, The University of Chicago, 1894–1994; director of the School of Education, The University of Chicago, 1902–1904; professor of philosophy, Columbia University, 1904–1930.
² Elementary School Record, 1902.

developed from that presentation, entitled "Ethical Principles Underlying Education," appeared in the third yearbook of the society (1897). In this essay he developed the theses which have served more widely than any other previously stated theories as the orienting basis for the reconstruction of the work of education.¹

In the years following 1896 Dewey developed his theory in connection with the Laboratory School and contributed papers on the practical reconstruction of the elementary and secondary schools. His breadth of interest ranged all the way from the minutiae of administration to the social and ethical foundations of curriculum and method.

In 1899 appeared the first three essays of his School and Society.² These represented papers which had been read at meetings of the parent-teacher association of the Laboratory School. They expanded the theory which had already appeared in Ethical Principles Underlying Education, in 1902.

It is probably safe to say that Dewey's School and Society, The Child and the Curriculum, and his later Democracy and Education (1916) have influenced the thought of teachers in service and

¹ The Educational Situation, Contribution to Education No. 3, The University of Chicago Press, 1902. In 1895 Dewey collaborated with James A. McLellan in the publication of a psychological analysis of arithmetic. In that book (James A. McLellan and John Dewey, The Psychology of Number, D. Appleton & Company, New York, 1895) the thesis was maintained, for example, that the idea of number develops best through practical measurement and around the ratio meaning of number. The authors illustrated their theories by outlining a course of study in arithmetic. Five years later this was systematically developed by McLellan and Ames (J. A. McLellan and A. F. Ames, Public School Arithmetic based on Dewey's Psychology of Number, The Macmillan Company, New York, 1897) in a practical arithmetic textbook. The ratio meaning of number was made the unifying basis of instruction, and practical measuring activities were introduced. That The Psychology of Number received close attention from students of arithmetic-teaching is illustrated by the fact that it has appeared in practically every important bibliography on the subject during the past twenty years.

² John Dewey, *The School and Society* (The University of Chicago Press), first edition, 1899; second edition, 1915; eighteenth impression, May, 1925. The second edition and the current impression included in addition to the original three essays ("The School and Social Progress," "The School and the Life of the Child," "Waste in Education") five others, parts of which had appeared from time to time in his articles in the *Elementary School Record*.

³ The University of Chicago Press, 1902; eighteenth impression, December, 1923.

teachers in training in educational institutions more profoundly than any other educational writings of the past generation. His little monograph Interest and Effort in Education,¹ published in 1913, has also played an important part in inspiring teachers with the newer point of view. In 1894 the original monograph (called "Interest as Related to Will") had appeared in the First Yearbook of the National Herbart Society. In 1904 Dewey said of the Laboratory School (which was by that time a part of The University of Chicago) that it was operated "especially for the purpose of scientific investigation and research into the problems connected with the psychology and sociology of education. Its aim was to further the application of scientific concepts and methods to the conduct of school work."

This statement is interesting because of its emphasis upon "scientific research." The literature of experimental education of twenty-five years ago abounds with references to the need for the use of techniques which were being developed in the older and well-established sciences. Both Dewey and Parker in Chicago and the Teachers College, Horace Mann School, and Speyer School groups under James E. Russell made frequent reference to the need for using scientific method in the reconstruction of education. This was some years before the real beginnings of the work of Thorndike or Judd in the development of scientific and experimental work in educational research.

In his writing about schools Dewey distinguished the experimental nature of his Laboratory School from the work done in the earlier ones. As he said in his famous essay *The School and Society*, he was guided by children's "full spontaneous interests and intentions." He urged that school subjects, like reading, writing, and arithmetic, should develop out of children's "life activities" and methods of living and learning, not out of "distinct studies."

As long ago as 1900 Dewey maintained that the life of the school was to be active, not passive; the children were to work, not merely to listen. The curriculum was to be organized around four chief impulses: "the social instinct of the children," "the

¹ One of the Riverside Educational Monographs, Houghton Mifflin Company.

instinct of making — the constructive impulse," "the expressive instinct — the art instinct," and the "impulse toward inquiry, or finding out things."

In the years following 1904 Dewey developed his psychological and educational theories and published these in several systematic books.¹

The Laboratory Schools and the School of Education at The University of Chicago since 1904

In 1904 Professor Dewey left The University of Chicago to become professor of philosophy at Columbia University. From 1904 to 1906 President Harper directed the Graduate School of Education; he was succeeded from 1906 to 1909 by President H. P. Judson. Until 1904 Professor W. S. Jackman was dean of the undergraduate part, The College of Education. This position Dr. Nathaniel Butler held from 1905 to 1909, and William B. Owen and Professor H. H. Belfield were joint principals of the University High School. Mrs. Dewey was principal of the Laboratory School from 1896 to 1904. In 1902 the name was changed to the University Elementary School.

In 1909 the School of Education was reorganized, and the department of education was separated from the department of philosophy. Dr. Charles H. Judd was made director of the four-fold organization, which included the two laboratory schools, the undergraduate college of education, and the graduate department of education.

The School of Education of The University of Chicago assumed a new leadership in the reorganization of education. Under Dr. Judd's direction the interest of the school became primarily the development of the scientific study of education. Parker and Dewey had earlier advocated the use of scientific method. However, lacking the techniques of science and being,

¹ The most influential ones were *How We Think* (D. C. Heath and Company, 1909) and *Democracy and Education* (The Macmillan Company, 1916).

in one case, interested essentially in practical school administration and, in the other, in educational theory, they had done little more than lay the groundwork for a scientific analysis of child learning and for the reorganization of the curriculum and of school administration.

By 1909, however, scientific methods were coming into their own in both Columbia and Chicago. Under the leadership chiefly of Thorndike in New York and Judd in Chicago the new scientific movement in education got definitely under way. The laboratory schools at Chicago, while continuing a vigorous interest in child activities and child growth, turned more and more to the analysis of the learning process under laboratory conditions. Under Judd's stimulation a decade and a half of active laboratory analysis of learning in reading, handwriting, and arithmetic was inaugurated. During the same time the School of Education. through its Elementary School Journal and School Review, lent great impetus to the movement for the reorganization of the grades of the public school. It would not be counted an exaggeration to say that the work of Judd and his associates in those formative years was one of the two or three chief influences which brought about the junior high school and the expediting of the scientific study of the learning process.

Three Decades of Practical Application: the Francis W. Parker Laboratory School, 1901-

Colonel Parker's influence has been exercised directly as well as indirectly in our own day through the establishment of several laboratory schools by persons who came under his influence. The most famous of these is the Francis W. Parker School of Chicago, which was organized in 1901 and was carried on under the direction of Miss Flora J. Cooke for thirty-three years as principal.

From the beginning the school curriculum was outlined in accordance with the conventional school subjects — history, geography, mathematics, English, and the like. The instruction of the high school (which has been essentially a vitalized college-

preparatory school) has, throughout its twenty-five years, been organized definitely in accordance with the school subjects. In the elementary school, however, concrete activities chosen in terms of pupils' needs and aimed at cultivating their personal development have served as unifying themes, or "projects," through which materials from a number of school subjects were brought together in broader departments. Conspicuous examples of the use of this principle are found in the physical and natural sciences and in history, geography, and civics.

In other words, the essential basis of the so-called "educational project" was in effective operation in the Francis W. Parker School, as it was in the Dewey Laboratory School, for years before the development of the systematic philosophy of the project method. Teachers in the Francis W. Parker School believed that

self-actuated work causes the greatest gain in the pupil; that training in initiative is a child's great need; that in his own interests we often find the educative spirit; that freedom, with a balancing responsibility, is the best condition of moral and intellectual growth; that real experience with actual material is an essential of learning; that opportunity for varied expression is necessary for right education; that for purposes of development children must be treated as individuals and not as a group; that one of the most effective and wholesome motives of work is the social motive.

This quotation from the first yearbook of the school is a compact statement of the theory upon which the school developed. The various yearbooks illustrate well the way in which the school tried to evolve a curriculum around the creative activities of children.

These volumes not only provide detailed illustrations of the way in which the school has organized its curriculum; they also illustrate the way in which it has tried to influence school practice.

^{1&}quot;The Social Motive in School Work," the Yearbook of the Francis W. Parker School, Vol. I, 1012.

Teachers College and Its Laboratory Schools

1. THE HORACE MANN SCHOOL (FOUNDED 1887)

The third force most active in the reconstruction of the school curriculum during the past half-century was the work of the schools of Teachers College in New York City.

The college was opened for the first reception of students on September 12, 1887. On the same day a school of observation and practice was opened, known until 1891 as the "Model School." This was a school in which "professors of education might experiment with the curriculum and methods of teaching as professors of science experiment in the laboratory." In the same vicinity, but at that time unrelated to it, Columbia University, under the leadership of President F. A. P. Barnard, was endeavoring to establish courses in the professional education of teachers. These early proposals of President Barnard led eventually to the establishment of courses in the philosophy of education which were later merged in Teachers College. In opening Teachers College, however, it was regarded as

important to have a school in which it was possible to illustrate improved educational principles and to demonstrate the worth of certain new theories in the training of children. In its advocacy of manual training, domestic economy, and the natural sciences as worthy of rank with the other subjects of the curriculum, the school was in advance of its times.²

From the beginning the Horace Mann group of Teachers College aimed at the improvement of education through the existing subjects of study — history, geography, arithmetic, reading, etc. They did not propose to abolish them and organize new types of activities, as did other reformers. In this procedure their work is to be contrasted with that of the Laboratory School at Chicago under Dewey, the work of Professor J. L. Meriam in establishing

¹ J. E. Russell, Teachers College Record, January, 1902.

the University Elementary School at the University of Missouri in 1904, and the work of Mrs. Marietta Johnson, at Fairhope, Alabama. On the other hand, the Horace Mann School, the Speyer School, and the Lincoln School ¹ from their establishment and the Laboratory School of The University of Chicago under Mr. Judd's direction sought to improve the school curriculum by assuming a middle position between "freedom" and "formality." This they tried to achieve by vitalizing the content of the school subjects and at the same time by organizing a large amount of spontaneous activity on the part of the children.

The staff of the Horace Mann School was permitted much latitude in the development of its curriculum. Those who were responsible for its development following 1900 (for example, Professor Frank M. McMurry and Principal Henry C. Pearson, working under the direction of Dean James E. Russell) recognized the startling advances in modern civilization and the necessity for the school to train children in quick response to new social demands. The school was regarded as a laboratory. It was the day of object teaching; textbook memorization was subordinated to the observation of real things and to the securing of an all-round development, in which handwork was given a central position.

One of the central ideas in the theory of the Horace Mann School and Speyer School groups was greatly similar to the nub of Colonel Parker's theory, and coincided with one of Professor Dewey's main contentions. Unity in the school curriculum was to be sought by careful organization of the work of the school subjects around central organizing themes. Parker's dictum that "the organization of community life should be the end and aim of education" was reflected also in the theory of the New York group. Various phases of social life, especially the occupations, were to be the correlating themes through which unity and continuity would be secured. Under the stimulus of "recapitulation" many schools were in those days organizing curriculums on the basis of the analogy between the development of the race and the development of the individual.

¹ Also a large number of the other laboratory or progressive schools established since 1910.

The development of curriculum-making in the Horace Mann School was influenced directly by the necessity for using the school in the training of teachers. It was more of a demonstration than an experimental school as embodied by the Lincoln School or the laboratory schools of The University of Chicago. Nevertheless the Horace Mann School exerted a great influence upon thousands of graduate students and educational visitors who studied its practice and tried to make use of its materials and methods. Indeed, one of the most influential factors in the redirection of public-school classrooms during the years since 1905 was the utilization of the Horace Mann School and the Speyer School in the training of graduate students. This influence is illustrated by the widespread reading of the Teachers College Record, whose pages from 1902 on frequently included the contributions of Thorndike, Straver, McMurry, Suzzalo, Pearson, and, after 1910, of Bonser, Briggs, Kilpatrick, Snedden, and their associates.

It is appropriate to pause here to point out that during the past twenty years a new and vigorous impetus has been given to the dissemination of the doctrine of educational growth in the work of William H. Kilpatrick. During that time, through several publications and through conspicuous success with thousands of students in Teachers College, Professor Kilpatrick exerted a widespread influence on the vitalizing of elementary-school instruction. He assembled and presented to teachers more concretely than any other worker the essential principles underlying the philosophy of growth through creative experience. He integrated into a systematic philosophy of educational method the essential ideas of biological evolution and of dynamic psychology as developed by James, Thorndike, Woodworth, and others.

2. THE LINCOLN SCHOOL OF TEACHERS COLLEGE (FOUNDED 1917)

In the autumn of 1917, under the direction of Teachers College, and financed in large part by the General Education Board, the Lincoln School was established "for the purpose of endeavoring by experimental methods to assist in the reorganization of subjects and methods of study which is already under way in the fields of elementary and secondary education." 1

From a staff of twenty-five in 1917, with a pupil body of a hundred and sixteen in the first five grades, the Lincoln School grew quickly to a staff of more than seventy and a pupil body of nearly five hundred, about equally divided between boys and girls and between the elementary and high-school grades. From the beginning the school was kept as a laboratory institution. The teachers in the school, in addition to attempting to operate an effective and ordered school, tried to discover new and better materials of instruction and improved methods of organization and teaching. Some of these "are enthusiasts. Others are skeptics; some live with children; others investigate children; still others drill them — when they can. . . . With all their individual differences, the members of the staff are highly sensitive to this much of a common purpose, namely, to find out something about education that will be sound and usable." ²

From the foregoing quotation it can be seen that the staff of the school and its experimentation during the first years illustrated both of the most conspicuous aspects of educational experimentation which have been set up through the laboratory schools in the last quarter-century. The curriculum of the school, like that of the Horace Mann School and the Speyer School, was organized (in part in the elementary school and altogether in the high school) around subjects of study. There was a distinct movement, however, to enlarge the scope of the subjects of study, as is illustrated by the work in the social studies, general science, and general mathematics. On the other hand, the teachers of the elementary school were motivated more by the desire to provide a continuous opportunity for dynamic growth through creative activity of all sorts than they were by the desire to have children master specified habits, kinds of knowledge, and principles.

² M. H. Willing, "The Value of an Experimental School," School and Society, May 15, 1026.

¹ Otis W. Caldwell, the director, stating the purposes of the Lincoln School in the first descriptive booklet (1918) following the establishment of the school.

Looking Back at the Three Chief Factors of Educational Reform

The fundamental ideas of these three reform forces,—of Parker's initial work, of the Chicago School of Education under Dewey and Judd, and of Teachers College, Columbia. — therefore. playing on the conventional school curriculum between 1800 and 1905, appear to be much the same. The chief distinction seems to me to lie in their methods of procedure. Throughout his quarter-century of dynamic work, Parker was always running a school and operating a training institution for teachers. He was immersed in the practical details of administration. He wrote little but spoke much. He rarely took the time to stand aloof from the current and whirl of practical affairs to think through the tangle of educational threads and conditions. John Dewey did hold himself aloof, however, and more than any other worker he has phrased the philosophy of democratic and social education under which the current educational situation is rapidly becoming oriented.

Thus Parker and his colleagues and the Teachers College group made their contributions in the attempt to improve the conditions of education through practical school experimentation and the training of teachers. Dewey made his by synthesizing and developing in written form the growing body of fundamental educational and psychological theory.

The Spread of the Laboratory-School Movement

Under the impetus of the leadership of the three groups whose activities we have traced in the foregoing pages, new types of schools were established in a number of centers after 1910. The state universities were developing professional schools of education, although in the main their practice schools were confined to the secondary level.

In 1904 Professor J. L. Meriam attempted to work out, in an eight-grade elementary school at the University of Missouri, a school curriculum organized on a nonsubject basis. He had recently returned from graduate study at Teachers College. For nearly twenty years this elementary school was operated under his direction. It represented an attempt to organize a curriculum of activities for children on a new departmental basis. The school day was divided into four ninety-minute exercises. This was in sharp contrast to the large number of ten-minute to thirty-minute exercises prevalent in the public schools. This lengthening of the class period represents an interesting and somewhat novel contribution to the creation of a more leisurely and thoughtful atmosphere in elementary classrooms. Corresponding to this fourfold division, the curriculum was divided into four types of activities: observation, play, stories, handwork.

In 1915 the University of Iowa established its six-grade elementary school under the direction of Professor Ernest Horn.² In 1916 the university high school was organized on a 3-3 plan. In 1922 the junior primary grade, or kindergarten, was added. The school has grown to a membership of about four hundred pupils, with a teaching staff in the elementary school of eight full-time teachers, five assistants, and one school nurse. The school is somewhat novel in that the classroom teachers are students in the university and are training primarily to become supervisors.

In 1914, in connection with the Bureau of Educational Experiments, New York City, a laboratory school was established under the direction of Miss Caroline Pratt, which was called the "Play School." The name was afterward changed to the "City and Country School," under which it now operates. The curriculum of the school has developed with the school itself. Beginning in 1914, small groups of children were classified in accordance with chronological age (instead of Grade I, II, or III the school speaks

¹ An exposition of Professor Meriam's theories will be found in his *Child Life* and the Curriculum (World Book Company, Yonkers-on-Hudson, New York, 1920).

² Professor Horn had been the first principal of the University of Missouri Elementary School, established by Professor J. L. Meriam in 1904.

of "the sixes," "the sevens," "the eights," meaning six-year-olds, seven-year-olds, eight-year-olds). The school grew year by year until it comprised most of the grades of the American educational ladder.

In 1915 the Walden School was established in New York City by Miss Margaret Naumburg. The school began with a group of children between the ages of three and five. It grew until today it includes a complete high-school department.

In 1920 Miss Helen Parkhurst, following the brief trial of her ideas in the Dalton (Massachusetts) schools and their widespread reception in England, established a private laboratory school in New York City under the name of "The Children's University Elementary School." The theory upon which this school is organized is described in Miss Parkhurst's Education on the Dalton Plan.

Relatively little experimentation comparable to the work which has been done in towns and cities has been carried on for rural schools. A striking exception was the early work done by Collings in the McDonald County (Missouri) Experimental School. This is described in his book.²

The laboratory schools have influenced public-school practice by encouraging personal visitation and observation of their work. Thousands of teachers observed and practiced in either the Parker Practice School, the Horace Mann School, or later in the Laboratory School of The University of Chicago. This influence has operated for nearly four decades. Gathering momentum year by year, it is now very great. The laboratory schools of the country are visited annually by tens of thousands of teachers or laymen interested in the improvement of education.³

¹ E. P. Dutton & Co., New York, 1922.

² Ellsworth Collings, An Experiment with a Project Curriculum. The Macmillan Company, New York, 1925.

³ For an extended critique of these laboratory schools see Harold Rugg and Ann Shumaker, *The Child-Centered School* (World Book Company, Yonkers-on-Hudson, New York, 1928).

The New Schools Formed the Progressive Education Association, 1918–

Immediately following the close of the World War the teachers and parents of several of the free-lance protest schools formed a new educational organization. After much debate the compromise name "Progressive" (admittedly not thoroughly satisfactory to any of the organizers) was adopted. A set of principles were drawn up, the initial captions of which were as follows:

- 1. Freedom to Develop Naturally
- 2. Interest the Motive of All Work
- 3. The Teacher a Guide, Not a Taskmaster
- 4. Scientific Study of Pupil Development
- 5. Greater Attention to All That Affects the Child's Physical Development
- Co-operation between School and Home to Meet the Needs of Child Life
- 7. The Progressive School a Leader in Educational Movements

For several years ² it was essentially an inconspicuous but dynamic clearinghouse for the discussion of new education. It was financed by many small contributions from individuals and carried on for several years by the untiring efforts of Mr. Cobb, Mrs. Coonley, Miss Morse, and others who served without financial reward. In April, 1924, financed by a gift from Mrs. Coonley, which was made annually for several years, the organ of the asso-

¹ Among those most active in the early years of the association were Mr. Stanwood Cobb, Mrs. Laura C. Williams, Mr. Arthur E. Morgan, Mrs. Avery Coonley, Miss Lucia Morse, Miss Gertrude Hartman, Mrs. Milan V. Ayres, Miss Marietta Johnson, Mr. Eugene R. Smith, Miss Anne E. George, Mr. Norton Snyder, and Mr. J. M. Dorey. Both Charles W. Eliot and John Dewey gave the new organization their blessing and successively accepted the title of Honorary President. See Stanwood Cobb's "Romance of Beginnings," in the January-March, 1929, issue of *Progressive Education*.

² The facts given herewith of the development and recent growth of the association are taken from a recent report by Mr. Frederick L. Redefer, executive secretary.

ciation, Progressive Education, was established under the direction of a paid editor, Miss Gertrude Hartman. Two years later the association had increased in size and in the scope of its work to the point of needing a full-time paid executive secretary. From that time to this the organization has expanded its work at an accelerating pace. In January, 1925, it had 1674 members; in 1932 it had 7617; as I write in the spring of 1936 it numbers 8600.

Starting with only one annual meeting, held in one of the larger cities, the association began in 1932 to reach educational workers all over the country through regional meetings. Under the vigorous leadership of Secretary Redefer, President Willard W. Beatty, and the executive board the influence of the organization spread, as indicated by the following statistical facts.

Individuals in Contact with Progressive Education through the Activities of the Progressive Education Association in Conferences and in Membership

												Number of Conferences
1931-1932				٠				٠	•	•	8,500	1
1932-1933	٠			٠			٠				8,804	3
1933-1934		٠	•	٠	٠	٠				٠	14,724	. 10
1934-1935	,									٠	23,202	14

The Two Strands of Real Educational Reconstruction Tend to Merge

To understand the present status of the movement toward educational reconstruction we must note now what happened to the two strands which we are studying. As you can see from the story told in Chapters IX-XIV inclusive, three separate movements developed after 1890. One, the administrative rearrangement of the externals of the school, was sheer tinkering; it produced no fundamental changes in the educational organism itself. The second one, the movement for the scientific study of education, as I have already shown, made possible some changes of

importance. Its studies of socially useful content led to the elimination of much "deadwood" in the skill-factual phase of the traditional curriculum. Its psychological and educational testing program led to the building of an important technique of diagnosis and of recording growth, and of a program of remedial work on certain levels. As we shall see in later chapters, most of the scientific methodists, under the impact of the evidence that accumulated from the researches of the physiologists and of the Gestalt and other schools of psychology, gradually became adherents of the organismic psychological viewpoint. In spite of it, however, most of them continued to sponsor the subject-organized curriculum and the "subject-matter-set-out-to-be-learned" approach in the school.

After 1920, however, a few of them came closely into contact with the innovators in child-centered education. I was myself one of the first of those to have that experience. Coming from Mr. Judd's ultrascientific measuring group at the University of Chicago School of Education in 1920, I was for nine years director of research at the Lincoln School of Teachers College, writer of new materials in the social sciences, and experimenter with children in the school. Two groups were represented on that dynamic faculty - the "scientific methodists" and the "project methodists." For nine years I participated in their struggle to understand one another. In hundreds of conferences, small and large, we fought and argued, presented evidence pro and con. With statistical charts and dramatic pictures of child growth and deficiencies, of content and of method, each group sought to get inside the minds of the other. Slowly, step by step, each group came to see more truth in the other's position. The scientific methodists grew more and more to understand the concepts of growth and active and integrated response in terms of actual child behavior and to demand their application in a curriculum of "activities" (see Chapter XIX). The child-centered group came to plan their activities more carefully, to base remedy on objective diagnosis, to respect certain types of measured evaluation.

I refer to the Lincoln School especially because the merging of the two strands of reconstruction in that faculty was one of the first examples of what proved to be the new trend. But I hasten to add that it was occurring to some extent in other laboratory schools, such as the Ethical Culture Schools of New York, the Dalton Schools, and the training schools of certain teachers colleges (such as that at Greeley, Colorado).

But it was the Progressive Education Association that acted in recent years as the most effective instrument for the fusion of the two movements into one, for the integration of the ideas and techniques of the "scientists" and the "activists." The second decade of its work witnessed the coming into the association of many persons imbued with the spirit of scientific study. During the same years that I myself became an active member of the board, the direction of the organization's work came under the impetus of such persons as Caroline Zachry, Goodwin Watson, Laura Zirbes, Lois Meek, V. T. Thayer, Willard Beatty, Frederick Redefer, Carleton Washburne, Boyd Bode, Ralph Tyler, Burton Fowler, and Robert Leigh. I name only a few of those who in various ways and to different degrees reveal in their personal outlooks the attitudes and ways of work of these two groups.

The most objective evidence that the new integrated point of view is at work on the educational scene is in the program of the Progressive Education Association's "Commissions." Under the conspicuous administrative leadership of Willard Beatty several of these have been financed with annual incomes of tens of thousands of dollars. This has made it possible for chairmen and expert investigators to be released from other duties to devote their energies to researches of a very new and fundamental type. Conspicuous among these commissions are the following:

- I. Commission on the Relation of Secondary School and College, Wilford M. Aikin, Ohio State University, chairman.
- 2. Commission on the Secondary School Curriculum, Dr. V. T. Thayer of the Ethical Culture Schools, New York City, chairman.
- 3. Commission on Human Relations, Dr. Alice V. Keliher, chairman.
- 4. Commission on Educational Freedom, Dr. Goodwin Watson, Teachers College, chairman.

Finally Is Not a Truly Child-centered School the Only Sound Society-centered School?

In spite of the vigorous efforts of the leaders of the "Progressive" movement to evolve an educational program that will really integrate the sound ideas of the various schools of thought. the controversy still rages over what I am convinced is a strawman issue - namely, the child-centered versus the societycentered school. Many professors in the universities and research bureaus and administrators of schools and colleges have failed to study their way to the very foundation of what a child-centered school really is. On the publication of my Child-Centered School (1028) many of my most progressive colleagues in education told me that I should regret the extent to which I had ignored "society" in that book. They maintained that I had made a lopsided, even theoretically unsound emphasis on "the individual." This, in spite of the fact that during the preceding eight years I had written more than ten thousand pages in the attempt to build experimentally a portrait of Man and His Changing Society 1 (see Chapter XXIII and the three editions of the Social Science Pamphlets, 1922-1928) and was organizing courses on the social psychology of the individual and the culture.

They themselves completely missed the point that "society" is merely two or more interacting individuals. Hence the school that is child-centered in the fullest dynamic sense is the one that is society-centered in the same sense. However, I do not wish to discuss the point elaborately here, for to do so would anticipate the evidence and argument brought forward in Chapters XVI,

XIX, XX, XXI, and XXIII.

¹ Man and His Changing Society, in fourteen volumes — eight for the elementary school and six for the junior high school. Ginn and Company, 1929—



Part II

A NEW PSYCHOLOGY FOR A NEW EDUCATION



CHAPTER XV · DEMOCRATIC VISTAS: MULTITUDES OF CO-OPERATIVE INDIVIDUALS

The First Question: What Is Education For?

THE PROCESS of taking thought about educational reconstruction must begin with the very foundation, that is, with primary questions of how we conceive of education: What is education for? What kind of men must the new education produce? What will they value most? To what will they pay allegiance?

The answers which one gives to these questions will constitute a statement of his philosophy of life and of education. They will orient and guide the educational worker at every point. They will, indeed, determine the content and organization of his entire educational program.

Consider first the conventional answer to the question What is education for? From time out of mind the answer has been "to pass on the social heritage." If the question be phrased, "What kind of men shall education produce?" the answer given will probably be "the real American" (or "the loyal Briton" or "the true German son of the Fatherland" and so on in whatever nation the question is asked). This answer would mean the successful businessman, the community or national leader who is the characteristic ideal of a contemporary society. Indeed, if the reader at this point will rescan Chapter V, "The Psychology of the American Mind," he will have a list of traits which the old education used as the background of its objectives.

Of the abstractly stated objectives that have appeared recently in books by the professors of education (and we must not forget that since 1910 these gentlemen have had a fair monopoly of the business of goal-phrasing for education!), two recur most frequently and are thoroughly typical of the schoolmaster's point of view throughout the First Industrial Revolution. These can be illustrated by an episode to which I was an eyewitness recently. I was listening to a class "recitation" in a course in the "Principles of Education" in one of the better teachers colleges and heard the professor ask from his textbook, *Introduction to Education*, "Miss Davis, what is the aim of education?" Nineteen-year-old Miss Davis answered (like her black-skinned colleague Marianne, of distant Jolo), "The aim of education is social efficiency."

A hand went up in the back of the room, indicating dissent.

"Yes, Miss Hill, what do you think is the aim of education?"

"The aim of education is adaptation to society."

This incident could be duplicated over and over each year in American teacher-training institutions. "Social efficiency and adaptation to society." Yes, but that is merely another way of saying "produce the characteristic American" or "pass on the social heritage." Fit the individual to the social order, teach him to adjust himself to his changing conditions, no matter how much the conditions may hurt. The socially efficient man is our ideal, says the textbook. The aim of education is to teach each individual to adjust himself satisfactorily to those about him . . . to become a good American . . . to learn to do things in the American way . . . to pull his own weight in society . . and so on.

But throughout this book data have accumulated to show that the conventional aims, like the traditional content and organization, cannot produce a generation of youth competent to deal with the overwhelming problems of the modern world. We must therefore find a new answer to our questions What is education for? What kind of man do we wish to produce?

First We Will Produce Believers in "the Democratic Vista"

There is one underlying concept which must be taken as axiomatic — namely, that the education set up must be one that will perpetuate the democratic culture. Democracy is postulated today just as it was throughout the century and a half of national life that brought us to the potentialities and problems of today. True Americans will not even entertain the possibility of giving up the democratic experiment and setting up a dictatorial form of government.

But, as we have already pointed out, this sets a very difficult task for the educational worker; it is nothing less than the task of rethinking the philosophic foundations of our social order. In a period of bewildering transition such as that described in Chapter VI, he who dares to affirm a faith in democracy must know whereof he speaks.

Specifically he must be aware of the assumptions upon which the practice of democratic government rests. The supreme one, as we pointed out in Chapter III, is that the preponderance of the individuals who make up society must have the capacity to give intelligent consent to the acts of their chosen governors. Intelligent consent, not ignorant or prejudiced acquiescence! That means that they should have the capacity and the trained ability to understand their collective problems in sufficient measure to choose representatives to deal with these problems in their name, to review the acts and policies of their representatives in office, and to dismiss them from office or continue them in it. Such practice is the very essence of democratic government, and demands an informed, thinking electorate. To obtain that, however, loyalty to a complicated set of abstract ideals must be built up among the people.

In autocratic governments men had no such difficult demands made upon them. They gave their loyalties and their consent to actual human beings — that is, to master, lord, king, emperor. Allegiance was paid to the dramatic figure of *il Duce*, an actual

physical person. These persons were easy to comprehend. They could be seen in the capitals of the states. Their pictures could be hung on the walls of cottages and public buildings. They possessed obvious human qualities to which the multitudes on the street could respond. Their words could be read and sometimes heard. Hence political loyalty and service, vested as it was in the personal man, was not a difficult matter, even for the unlettered and the comparatively unintelligent.

What is true of predemocratic governments is true of dictatorships today. It is characteristic of all dictatorships that they impose allegiance upon the people; the consent they seek is the unthinking consent of ignorance. Furthermore, the loyalties which they impose are made dangerously and falsely simple, thus easily understood. These are dramatized and emotionalized in order to get blind adherence, with no regard to the necessity of intelligent public consent to the underlying ideals and purposes involved. Note, for example, how in 1933 and thereafter Adolf Hitler gave the people of Germany simple, definite things to which to be loyal: slogans, uniforms, flags, rhythmic bands, marching orders. He did not ask the bewildered German people to think; he played upon their emotions.

What Hitler did in Germany, Mussolini had done years before in Italy, and Lenin and Stalin had done in Russia. These leaders seized power and gave the people simple and dramatic slogans which fired them to give allegiance to their new government. For example, "work hard for the good of the state"..." Instant and complete obedience to leaders, elders, and ancient traditions"..." Sacrifice for the Fatherland"..." Our country right or wrong"..." Purge our country of all aliens"..." Help build the Fascist state"..." Build a Communist world." The people were not to think, to experiment; they were merely to follow their leaders. Problems were not submitted to them; instead programs of action were imposed upon them.

Here, then, were slogans, clear and dramatic, in a setting of emotional stress and strain. They helped to develop a vague and transitory feeling of comradeship and solidarity which had no permanent basis in thought. Primitive emotions, especially the emotion of hate, were seized upon. Instead of dealing with such difficult and remote abstractions as "democracy" or "integrity," the masses merely reacted against definite objects of contempt — Jews, Negroes, pacifists, aliens, what not. In this way marching youth are turned into storm-troopers, and democracy is travestied by dictatorship.

But democracy puts upon men's minds an overwhelmingly difficult task. It compels the people to formulate and to pay allegiance to abstract ideals, rather than merely to follow an actual man. Democracy requires opinions; it acts on such abstract issues as political and civil liberty, free speech, the right to assemble in any public place, the right of trial by jury, the right to vote. Even these specific rights and duties, difficult as they are, are infinitely easier for the individual to comprehend and to desire than such further abstractions as democracy itself. Indeed, the basic assumption underlying the prosecution of democracy has never been visualized by more than an infinitesimal fraction of the entire population of any democratic country. "The democratic vista" which Walt Whitman saw ahead of our growing America still lies on the far horizon.

These facts confront those who would plan a new educational philosophy by which to guide educational reconstruction in America.

Second We Shall Need to Produce "Multitudes of Individuals"

But the very nub of the democratic tradition is the "individual." As we shall show in Chapter XVII, the culture of a people is made by the interaction of the individuals who compose it. It is the individual man who is of prime importance, and real equality of opportunity for his development lies at the very basis of democracy. We shall, then, wish our schools to produce a society of men and women each of whom is developed to his very highest potential stature. This is, indeed, the essence of the American tradition. We shall aspire to a civilization which provides

maximum opportunities for the development of every capacity of every individual in the population. Our nation must become one of "whole" men. To bring this about we must find the way to produce the "multitudes of individuals" of whom Walt Whitman dreamed in his "democratic vista." It is this fullest possible development of the individual that constitutes true democracy.

THE LOST INDIVIDUALS OF THE PRESENT

To understand the problem of the individual of the present day, one must understand the disappearance of the old loyalties during the past two centuries and the lack of stable new ones. The loyalties of premachine days were relatively fixed and simple. The very physical conditions of life remained unchanged for years. People lived in little self-sufficient communities; whole generations lived and died in the same narrow, restricted localities. They produced food, shelter, and clothing with the same implements, by the same methods, and in terms of the same ideas as their ancestors had done for centuries before. Communication was almost altogether face to face.

With physical life thus definitely and narrowly bounded, it was inevitable that mental and emotional outlooks should be equally definite and narrow. Men lived in a small closed universe; each could see the limits of his world. Small though it was and physically uncomfortable though it was, there was great stability about it. What people did was governed by clearly defined loyalties. There was the loyalty of young people to their family; there was the loyalty to elders and to the community or tribe. There was the loyalty to the political leader. So, for generation after generation, aims and ideals were clear and constant.

Man's conduct was further ruled by loyalties to another world. The priestly order prescribed the codes of behavior, careful adherence to which guaranteed one's entrance into heaven. God, his prophets, and the saints were perhaps the most deeply rooted of all the objects of allegiance.

The concept of "change" was therefore practically unknown to men before the time of the First Industrial Revolution. Such

changes as came through contact with Asia and Africa after 1100 A.D. came only slowly. Those made in any given year or any given generation were after all comparatively slight. Thus constancy came to mark both the life of the people and the character of the loyalties which guided their lives.

But as the narrow, simple, and easily understood world of the frontier, the village, and the small town gave way to the complicated, almost bewildering, incomprehensible complex of manufacturing and trading cities, the emotional stability and continuity of life broke down. Unrest and fear were born out of the increasing instability and change. The First Industrial Revolution played its part in creating lost individuals in the growing population. Roads and railroads, engines and printing presses, radios and telephones, enormously stretched the mental horizons of people. Occasions demanding understanding and sympathy multiplied, and at the same time the more enlarged and complex social settings required vastly increased intelligence and tolerance.

As a consequence of the rapidly increasing complexity of our economic-social situation, today most of us have lost faith in our ability to master our own destinies. Many of us have resigned ourselves to the fact that we are caught in a swiftly rushing social current which we can neither understand nor direct. We are bewildered, and do not know which way to turn. Perhaps, indeed, the most outstanding characteristic of these transition years is the helplessness and despair of a people who, faced with the necessity of meeting utterly new situations, have only old and obviously inadequate loyalties and ideas to apply to them. The old world has disappeared, and the new world which is now replacing the old is not sufficiently comprehended to win transferred loyalties.

Hence the individual is cast adrift with no sure mooring mast as his economic and social institutions collapse around him. His former allegiances to the idea of successful competition, of obedience to elders, of a secure life in the world to come, and to the old idea of democracy — these and other loyalties are rapidly disappearing.

This, then, is the background of our search for new loyalties. This sets the stage for the educator as he confronts the problem of building a whole new program of education for a new social order. The psychology and philosophy of America, the character of the "multitudes of individuals" who should compose the new democracy, the new loyalties to which and by which they are to moor their lives — these lie at the foundation of all educational reconstruction. They bring us back to the second of the two fundamental problems about which this book is centered — namely, the problem of building true consent among the people. It is upon this problem that our attention is riveted in the reconstruction of American education. Democratic consent is essential in the building of a new, co-operative social order and of the personal self-expressive way of living of a nation of "multitudes of individuals."

The New Social Philosophy of a Nation of Co-operative Individuals

It is clear that the reconstruction of American education requires a new social philosophy and that this must be developed within the framework of our existing industrial-democratic tradition. Though the problems which we confront at present are too novel to be solved without a new theory of life and education, still they cannot be solved apart from the old conditions and the old desires in which they had their origin. Let us state next, therefore, the necessary characteristics of this new theory of life and education.

FIRST THE NEW PHILOSOPHY MUST BE SOCIALLY CO-OPERATIVE, NOT COMPETITIVE

The picture of the new society which has been produced by the social trend of the past half-century leaves no doubt that the old world-wide concept of *laissez faire*, of individualistic competition, must now be discarded. The theory of life upon which we base our new educational program will be social and cooperative rather than ruggedly individualistic and exploitive. The social man, the co-operative man, must come to be the consciously phrased ideal of family, neighborhood, and institutional life. It must characterize the climate of opinion in new America to the far-reaching degree that the idea of success through competition gripped the imaginations of adults and young people and motivated their conduct in past generations.

In the past the ideal American, insofar as educational workers have visualized him, has been the successful, restless producer of projects; a schemer, not a thinker; a rugged individualist, not a co-operator; a builder, not a designer. Thus educational workers have tended to hold a nonsocial theory of life and of education, a theory that has emphasized the right of individuals to exploit without hindrance. They must now recognize that the trend of society is in another direction, toward the widespread socialization of group activities and purposes. Already there is growing acceptance of the concept of social co-operation in place of that of individual exploitation. Even many businessmen and political leaders, with their profits and careers at stake, are grudgingly granting the necessity for some social control over economic life.

SECOND THE NEW PHILOSOPHY MUST ALSO BE INDIVIDUAL AND DYNAMIC

Moreover, the new educational philosophy differs from the old one in that it is conceived of as evolving from within individuals. According to the old philosophy, loyalties and truths were handed down to the people by leaders in authority. According to the new, the people adopt whatever allegiances and accept whatever truths they discover for themselves. And correspondingly each educational worker must develop his own theory of life and education. A philosophy, an outlook upon life, cannot be "given." No person can take another's philosophy and use it as the guiding criterion for his own life. Neither can the leaders of a school take on the philosophy of another leader and make it the guiding doctrine of the whole school. So we must all build our separate theories of

life and education out of the data of our own individual day-today lives which are lived in the midst of the changing American scene.

THIRD THE NEW PHILOSOPHY MUST REPRESENT A REAL COMMUNITY POINT OF VIEW

Closely associated with each individual's need of a social philosophy is another need, namely, a community point of view about education. It is indeed imperative that the communities of America launch upon a program of co-operative discussion of education. The principle which we have just now enunciated — namely, that no person can take another's philosophy and use it as a guiding theory for his own life — applies also to communities as a whole. No superintendent, principal, or teacher can expect the community or the neighborhood to co-operate with his educational program unless the community understands and accepts the theory underlying it. Leaders of neighborhoods, of communities, and of the whole nation, therefore, must work in close co-operation with boards of education, supervisory officers, and teachers to evolve a community point of view about education.

With the members of the board of education serving as a nucleus, let the superintendent and the staff develop little culture groups in the neighborhoods of the community. Let these set up agenda of work, the groups working together week after week throughout each academic year. One most important phase of the agenda will be the discussion of economic and social trends and their implications for the school. Perhaps the most fundamental one will be the development of a community philosophy of education fitted to the changing conditions of these transition years.

It is thus that the climate of opinion in the nation grows and thus that the outlook of communities can be changed with respect to education and the new social order.

FOURTH THE NEW PHILOSOPHY MUST PROVIDE DRAMATIC AND INTRIGUING LOYALTIES

As we have seen, people under a dictatorship get their loyalties from their leaders. In a democracy, however, people must create their loyalties for themselves. This does not mean that there is no room for leaders in a democracy; indeed, leaders are more necessary in the democratic course than in the dictatorial one. Democratic government is essentially education. There must be leaders, therefore, who will educate the people to an understanding of their problems and the underlying issues of those problems.

It is important to note, however, that democratic leaders must emulate the dictators in one respect. They too must find appropriate slogans with which to dramatize the traits of the new American and of the new social order which they desire to create. They too must employ good psychology in influencing the group mind. But they must do this as a matter of total education and not with the idea of propagandizing through censorship. They must present the data of every side of every issue, as well as the historical material and the contemporaneous dramatization, necessary for the people to understand the problems and issues which confront them. In this way the action of a people can be based increasingly upon intelligent understanding. While this democratic course is infinitely slower and more difficult than the dictatorial one, it is the only permanently effective one.

Having arrived by this method of study and discussion at decisions which represent the consent of the group, these may then be dramatized by such vivid slogans and concepts as security, abundance, liberty, freedom of speech and of the press, freedom to believe what one will, equal opportunity for all to develop, a fine standard of living for all, and the like. Such emotional dramatizations, coupled with hard intellectual work on the part of millions of our people, will bind them together around clear, simple concepts and ideals.

Classic Personalized Statements of Educational Goals

Each culture and each age tends to set up an ideal man and to produce him through its institutions. Among the cultivated Greeks, for example, the ideal was that of the magnanimous man and the philosopher. In the cultures of medieval Europe the ideal was the gentleman and scholar. Such ideals were personifications of the educational objectives of the times; they indicated the "why" and the "what" of the school program. The statesmanship of the philosopher, the integrity of the gentleman, and the rigorous thoroughness of the scholar epitomized in vivid lines what the Greeks and the medieval leaders thought education was for.

Still other civilizations set up the scholar-philosopher as the ideal. For example, the producer of ideas was ranked highest of all in the social hierarchy of ancient China; he was above even the producer of physical things. Indeed, so highly was he regarded that at various times in China the scholar-philosopher was the ruler of a state.

But in the practical competitive world of America of the First Industrial Revolution all these goals have been utterly out of place. As we have seen, the American ideal has been the man of action, the restless builder, as typified especially by the successful businessman and the political leader. It is now the task of educational philosophy to modify this ideal and, through the schools, to promulgate a new conception of education appropriate to our history and to our times. We must make up our minds concerning the kind of man we wish education to produce.

Our Dramatic Portrait: the Modern Man

Certainly one conclusion can be drawn from the data of the preceding chapters: the goal of our education shall be a man fit to live in the modern world. No one of the ideal types of earlier

cultures will serve the society of the twentieth century — neither the cultivated Greek'scholar-philosopher, the cultured Chinese student-statesman, the medieval gentleman or courtly knight, nor the aggressive, building businessman of the first industrial epoch. While each of these, perhaps, served as an ideal to magnetize the behavior of men in its respective culture period, no one is sufficient for our new era. For, as we have seen throughout Book I, our day is the *Modern Day* and *only the truly Modern Man* can live in it successfully. The Modern Man, then, shall be our educational objective.

The laborious documentation of the preceding pages now bears fruit in another direction; it supplies us with the traits demanded of the Modern Man. These are nothing short of the abilities required to meet the drastic needs imposed upon mankind by the conditions and problems of the Great Transition. To live in the modern world, then, the Modern Man shall be four men integrated in one. He shall be Technological Man... Democratic Man... Man-as-Artist... and Religious Man. All in one, and one in all. An organic Man—not a mechanism assembled from separate traits, as the current education conceives him. Yet we, visualizing the characteristics in the Man, can point them out without denying their inextricable interdependence on one another and the need of their integration for true effectiveness.

I. TECHNOLOGICAL MAN

Efficient technologist, rigorous master of his trade, honest and skilled craftsman — whatever be his materials of expression... a comprehending person, understanding modern life...a man of integrity and awareness as well as of technical skill.

Each person in his own occupation, becoming the efficient technician, will carry on the tradition of Roger Bacon, the precursor of Modern Man, whose exclamatory exhortation "Look at the World! Experiment!" prodded and guided the amazing army of scientific workers from the days of Galileo, Francis Bacon, Newton, and Descartes to those of Darwin and, later, of Einstein. In four hundred years the European man has de-

veloped an attitude of mind and a scientific technique which make it possible to solve successfully many difficult problems of material existence.

On the North American continent these ideas have already brought about a potential economy of physical abundance for all. They have reduced hours of manual labor and have cut down the pain and effort involved in obtaining a livelihood. They have increased the length of life and have provided a startling variety of activities for the common man to enjoy in his new leisure. Already they have dismissed human slavery and have now begun to wage successful warfare on economic slavery. Thus, although there remain problems of awful importance, as we have revealed in the preceding chapter, these physical achievements of the scientific attitude and methods of inquiry are actualities. Society has indeed been transformed within the past two hundred years. So, first and foremost, we set the scientific attitude and the informed thinking Person as our primary intellectual goal.

2. DEMOCRATIC MAN

Dogged believer in the multitude of individuals...a comprehending Person, understanding modern culture, master of the attitudes and concepts of contemporary industrial-democratic society...loyal to the ultimate rightness of thought-out group decisions...convinced adherent of freedom of thought and discussion.

But these are the traits necessary to the production of intelligent consent among the people. "Consent" implies intelligent understanding by a great compact minority of a people of the conditions of living, the problems, issues, and trends of their culture. And this, as we have seen, cannot be achieved by the slogan, exhortatory method employed by dictators. It can be guaranteed only by an educational program based on an analysis of actual economic, social, political, and spiritual conditions and problems. Only by thorough participative study from the cradle to old age can the millions of Americans become adequately informed and tolerantly, sanely critical of proposed solutions for

their contemporary problems. A truly expressive philosophy of life for a complicated industrial society like ours will therefore be a program of education that will constantly preserve the scientificexperimental attitude which leads to intelligent consent.

3. Man-as-Artist

But life is far more than solving problems. In vast areas of experience our behavior is not guided by "the experimental attitude of inquiry." When listening in rapt attention to Grofé conducting his *Grand Canyon Suite* or Stokowski directing the Philadelphia Orchestra through Beethoven's *Ninth Symphony*, when catching the reverberation from an O'Keeffe painting or a Brancusi sculpture, when reading Gertrude Stein's *Three Lives*, then analysis, reflective thinking, is not the attitude which is uppermost. These are experiences to be lived to their fullest emotional depths. They are to be thrilled over and appreciated, not rationalized. They are experiences of rhythmic action. Each is a rare integration, a multitude of fused impressions and conceptions.

Hence the Modern Man will be more than Technologist and Democrat. He will be Artist as well, striving constantly to be sensitively aware of the beauty in every situation . . . to see the fullness of life in every organism — the plant, the animal, or the human being . . . to approximate this organic beauty to the best of his ability in all his expression with the mechanical materials of his occupational life . . . to approach life more and more with an outlook of detached contemplation, of appreciative awareness . . . to give frank play to emotion, feeling-import.

Integrity is perhaps the central idea and attitude of the truly creative artist. Man-as-Artist does not seek merely to "get by," to obtain the approval of his fellows. On the contrary, he makes what he says and does, his entire behavior, a replica of his true self. He constantly tries to utter only what he is. As I have said elsewhere:

The Man-as-Artist constantly strives to speak, to write, to make, to live, what he feels and thinks, in short what he is at a given moment.

This is the measure of a sound personal philosophy of living. Note the dogged determination of the man, the actor, the painter, the composer of music, the writer of words, the dancer, the carver in wood, the chiseller in marble, the architect of the house, the statesman of the nation, the goodly judge of the court, the philosopher of the society, to objectify what he feels.

But he must also be taught the integrity, uniqueness, and superiority of his own personality. He must learn tolerant amusement for the mad race for Money, Things, Power. He must be made consciously aware of the self as the unit upon which society is built. He must be supported in his obstinate determination to be happy. He must be shown how the artist, the saint, and the lover have achieved the ecstasy of happiness by contemplation and meditation. He must be taught that a day is wasted that has not left time for the cultivation of the awareness of the worth of life.¹

Such a confident affirmation of his own superiority as this (though not relative superiority over other personalities) is the chief reason for a man's living. If this concept could be built into the program of education and into the program of personal living, then between Man and his life there would be no gap. Theory and behavior would be one continuous unified experience, and the current widespread regime of hypocrisy would disappear.

Naturally it is not easy to portray in words the abstractions which epitomize such rich fusions of meaning and emotion. Indeed, the artist has long lacked the definitive vocabulary of the scientific worker. Intellectual expression primarily through words and mathematical symbols has been the characteristic stock in trade of the Western world, and utterance is therefore relatively easy for the physical sciences. A clear language for the artist is another problem still to be undertaken. At this point in our discussion we merely indicate briefly his general characteristics; in later chapters dealing with the education of the individual in these respects, we shall attempt to add fullness and clarity to our exposition.

¹ Harold Rugg, Culture and Education in America, pp. 231, 236. Harcourt, Brace and Company, New York, 1931.

4. Religious Man

Finally the Modern Man will be endowed with traits of spiritual sensitiveness. As we have shown, our *laissez faire* civilization is cultivating the competitive and exploitive instincts of men who naturally tend to be egocentric. As things stand in our monetary and productive culture, nature and nurture co-operate to make selfish and aggrandizing men of us.

But the documentation of this book has shown the dire necessity of substituting social co-operation for competition. To do that, however, the ideal of love of fellow man must be held constantly before our eyes, an ideal as old as the history of the religious attitude. The Modern Man will pay allegiance to his own integrity; but he will also accept implicitly the integrity of his fellow man. He will be a believer in the validity and value of every thought-out personal philosophy. He will admire the honesty and the beauty, the "authentic inner truth," that emanate from another personality.

These, then, are the rough outlines of a portrait of the Modern Man. This is the ideal that we shall hold before us as the goal of the new education. This is the tentative answer to the question What is education for?

CHAPTER XVI · THE INDIVIDUAL AND THE CULTURE: SOCIAL PSYCHOLOGY

Our Need to Study How the Individual Man Is Formed

To construct a sound theory of democracy and education, we must explore more thoroughly the relations between the individual and the social order. We have shown that the former is the nucleus of society, that a society is indeed nothing more nor less than the psychological interaction of two or more individuals. Hence it is imperative that educational workers have a clear grasp of the manner in which the individual becomes an individual.

We shall seek to answer the question How does the culture mold growing human beings into definite kinds of adults? In doing so we shall, at the same moment, be accumulating data with which to explore other basic concepts and issues of democracy. For example, we shall be in a position to consider what freedom really is in our modern complex society? How is it to be distinguished from freedom in a simple frontier society. To what extent can we be free in our present psychological world? Does society, then, indoctrinate? Shall the school do so? Shall we "teach" a new social order in the schools? Shall we consider controversial issues in the schools? What is the relation between "issues" and the psychology of consent? Finally what is the true role of the educational worker in the schools of a democracy?

First, then, how does the culture make the individual?

I. Experience in Groups Molds Man's Character

Consider first the ongoing stream of experience which constitutes the everyday life of most of the men and women of America.

The average man rises in the morning for breakfast among the other members of the family group; he then goes to his work for seven, eight, or nine hours, generally in small occupational groups. At noon he spends the luncheon hour with other social groups or back with his family group. Similarly homemaking women assemble in still other kinds of neighborhood and community groups. Neighborhood clubs, card clubs, sewing clubs, what not, are interspersed through the days of many. There are, as well, varieties of group activities involved in the buying and selling of goods.

The late afternoon and early evening, including the dinner hour, again bring together most of the members of the family, and informal activities of many kinds go on. The evenings are filled with still different kinds of group enterprises. Family groups, with or without neighbors, assemble in their homes and listen to the radio, have informal discussions, play bridge, and carry on other social activities. Members of the family also go outside the home, though ordinarily still in groups of at least two, to the movies, the theater, exhibitions, concerts, dances, and the like. "Lodge" meetings draw many; the church carries on its regular weekly, monthly, and annual activities. Somewhat smaller groups convene to engage in intellectual pursuits listening to lectures, engaging in open-forum discussions, reading papers, making group decisions in controversies, and the like. Festival times, such as holidays and other vacations, reassemble individuals into still other types of groups. The clan-family gathers for its Christmas and Thanksgiving celebrations, as it does for family reunions, birthday celebrations, and the like.

This, though brief, is typical of the changing zigzag course of human experience. For some, especially for those in small communities, the course of life is regular and unvaried; but for increasing numbers, especially for those in cities, it is increasingly varied. However, irrespective of whether it is routine or varied, the stream of human experience shows one outstanding characteristic: it is social, carried on in groups. The entire nation is a conglomeration of groups — blood-relation groups; neighborhood groups; economic-occupational, social, religious, educational, professional, political groups; groups interested in international relations, groups devoted to the carrying on of this, to the changing of that, to the proving of something else. Thus man is a social animal. Most of his life is lived in groups.

THROUGH WHAT AGENCIES DOES EXPERIENCE MOLD AN INDIVIDUAL?

Three important agencies contribute to the making of normal American life as it has been thus briefly pictured.

First, these face-to-face groups of daily life to which we have referred,—the family, neighborhood, church, school, job, and lodge,—all these powerfully mold personality. They continuously influence our minds, form our points of view, model our opinions, beliefs, and general understanding. First, then, are the face-to-face groups.

Second, the individual is being molded also by agencies not directly personal. Note, for example, the influence of the daily and weekly newspapers, popular magazines, pamphlets and bulletins, addresses, books, what not. There is likewise the powerful impact of the radio, with its Amos and Andy, its Father Coughlin, and its Captain Bartlett, its international broadcasts, the tomtom of its interminable jazz bands, and its occasional symphonies and concerts. Note also the shaping effect of the motion picture upon the minds and personalities of fully half the nation; the influence of the newsreels, with the organized propaganda of both government and private agencies behind it; the more or less unrecognized influence of the public-relations counsel; the effect of supersalesmanship, which makes use of the press, the movies, the radio, the billboards that line our national highways, and even airplane skywriting.

These, then, constitute some of the less directly personalized agencies which help to mold the individual and hence to make the culture of the people.

Third, finally there is another factor—namely, the climate of opinion of the community—which makes the individual what he is. This subtle psychological influence operates upon us in the face-to-face groups of community, region, and nation; in the conglomerate secondary groups that never meet; and in the total communal life as well. Throughout this book we have referred recurringly to the deep-lying influence of the emotional-mental atmosphere in which we live and have our being. Although it is invisible, it is constantly pressing in upon us—sometimes directly by word of mouth and overt physical gesture, but always in the ever present, invisible, general tone of the group and community life.

These, then, are the three outstanding kinds of agencies which make the individual what he is.

II. The Interaction of the Individual and the Social World

Next let us study a bit more closely the psychology of the process by which the growing individual is formed by the groups about him. A child matures in the midst of family, neighborhood, and community groups, each individual of which is a unique personality. Each reacts to social situations with certain meanings and generalizations which form his intellectual background. Each has his own conception of the physical and social world. Each holds certain personal views, beliefs, and convictions with respect to people, institutions, problems of community and national life, and the like. Surrounded by groups of egocentric individuals — each one more or less consciously striving to make over all the others on the pattern of his own image — the child lives his days passing from one little changing group to another. Each reacts to him, and he in turn reacts to each.

Confronted with an overwhelming confusion of stimuli, the child necessarily responds to only a few. The social world is too complex, there are too many meanings and emotions pressing in upon him to permit him to make adequate responses to very many of them at once. So from early childhood the individual learns to respond to each complicated situation with a few cue meanings. Through an elaborate procedure of trial and error, from infancy through the years of youth, he learns that he can control the people about him by reacting to them in special and selected ways. He learns to make characteristic responses to the confusing stimuli pressing insistently upon him. These we call "stereotyped" ways of behavior.

The child or the youth, thus assailed on every side by a multiplicity of stimuli, reacts not only with selected meanings but also with self-defensive ones. He learns to defend himself against the essentially egocentric social world around him. In the midst of group after group of self-centered, aggressive individuals, he himself learns to be self-centered and aggressive. Thus, even before he arrives at the age for school attendance, he has learned to respond to the world about him with a well-organized scheme of self-defensive mechanisms. In a later section we shall consider this process in greater detail.

The child, then, learns to build up meanings and to use them to control the complex mental-emotional world surrounding him. Meanings are conveyed back and forth in flashlike succession by words or by gesture — a frown, a smile, an upturned eyebrow, or other dramatic expression. Through such means of communication, attitudes and meanings are conveyed from person to person, beliefs are transmitted, stereotyped convictions are passed on. Each social contact brings its changes in the points of view and understanding of the individuals involved. Gesture and word together change attitudes, beliefs, and points of view, and modify personalities. All day long, all life long, through constant give and take in changing, overlapping groups, the molding of the social culture of the people proceeds.

Note, then, the twofold nature of this interaction between the individual and the group. On the one hand are groups of ego-

centric individuals, exerting pressures, warping, stamping, and labeling the growing child or youth; on the other hand is the growing individual himself, learning to adapt himself to and defend himself against the confusing world. Two opposed kinds of action and reaction: group pressing in upon the child; child adapting or resisting and defending himself against it. The culture of the group making the man; the man constantly contributing his bit to the remaking of the culture.

Now we see that society is merely two or more individuals interacting in a social setting, their minds interpenetrating one into the other. Group life, then, is a kind of continuous "circular response" between the individuals who constitute the group itself. Hence one cannot escape the conclusion that the individual and the social groups which constitute a people's culture form a single integral organic structure; this makes it utterly impossible to think of a "separate individual." Such an entity is merely an abstraction, not a reality in social life.

MAN REACTS ONLY PARTIALLY TO THE SOCIAL WORLD

One aspect of this interaction between the individual and the group is of great importance to educational workers — namely, the partial, short-circuited character of the meanings with which the responses are made. Recall the complex character of any social situation and the impossibility of an individual's reacting to the multitudes of elements in it. It is inevitable, therefore, that he will respond only to selected phases of the situation. He picks conspicuous aspects of character, the striking people and the more prominent features of a situation, the outstanding characteristics of institutions, and reacts to the situations in terms of his reaction to these elements. This point is so important that we shall need some illustrations.

First recall how each individual lives the course of his daily life in many different groups. In these groups persons of like interests clique together, standing for similar points of view, defending their own peculiar interests and philosophies. Thus the members of a given group hold the same general attitude, adhere to the same ideas in so far as these ideas are peculiar to that particular group. For example, note the important economic groups — businessmen organized into Rotary Clubs and chambers of commerce, workers into labor unions, farmers into farmer cooperatives, and the like. Each of these groups tends to stand for a given position in economic matters, although the members of any one group are not necessarily in agreement on political, religious, social, aesthetic, or other matters.

In the same fashion, too, persons of like political interests tend to join the same parties, each one of which stands for the same general position. Republicans and Democrats, standing primarily for the status quo, form one type of group. Somewhat more toward the Left are groups which would make some changes in the organization of our political and economic life—the Liberals, the Social Democrats, the milder Socialists. Still farther toward the Left are those who would more completely reconstruct society—the Communists, the members of the Workers' party, and others. At the extreme Right are the "reactionary" protagonists of the established economic order of private capitalism—for example, various types of "hundred-percenters," Fascists, and others.

Religion also tends to amalgamate those of like beliefs into compact "in-groups." The selective character of meanings in this process has always led to the sharpest of cleavages, lining up Protestant against Catholic, Jew against Gentile, Christian against Moslem, Buddhist, and any others. And some of these sects are even divided and subdivided among themselves: the Protestants, for example, being split up into Methodists and Baptists (and Southern versus Northern Baptists!), Fundamentalists and Modernists, Christian Scientists and New Thoughtists, and so on ad infinitum.

In the same fashion racial and national ties tend to align human beings into conflicting groups, setting us up as "Nordics," "Slavs," "Latins," "Orientals," Negroes, Bantu, what not.

Hence the psychological base of human culture, especially in the infinitely complex and heterogeneous modern world, consists of a confused mixture of points of view, opinions, creeds, beliefs, and the like organized and stamped and labeled. And as each mind struggles to comprehend this mixture, it gets itself similarly organized. Thus when one individual reacts to another, he sees him not as the mysterious and complex personality that he is; rather he sees him as a composite of traits which he has learned to associate with members of various groups. He pigeonholes and classifies him under groups, which therefore come to bear abbreviated class names — Jew, Gentile, Christian, Catholic, radical, conservative, Negro, Communist, Mason, D.A.R., and the like.

So it is inevitable that the young child, otherwise overwhelmed by this confusing heterogeneity of life, also learns to react to people (and to "institutions," to problems, and to theories) with these abbreviated, stereotyped class names. He builds up his own personal idea of what a radical is; similarly he slowly forms his concept of liberal. Fundamentalist, Jew. Christian, labor leader, and the like. He builds up concepts for the "Bolshevik," the Chinese, the Japanese military, the Harvard man, the professional athlete, the banker, the bandit, the United States Senator, the political agitator. Thus, as he reacts to successions of social situations, he does so in the light of his mental pictures, with his classified, emotionally colored concepts of the points of view, the desirability, and the attitudes toward life of the person or group involved. He does this because he cannot react to the elaborate integration of details which constitutes the total human being or the total situation. He can respond only to those conspicuous phases of the complex situation which obtrude at any given moment.

These facts have great significance for the building of that common understanding upon which democracy is postulated. It is almost inevitable that no two people will select exactly the same meaning with which to respond to the same situation. Hence the concepts that people use in communicating with one another carry great divergencies of meaning. For example, no two people mean the same thing by such concepts as democracy, capitalism, imperialism, Communism, Soviet ambassador, banker. When, therefore, a political situation arises involving

these ideas, each one concerned will select his own personal meanings with which to respond to it. Hence the consequent difficulty of building solidarity of point of view, of securing universal "consent," and of producing joint action. This perhaps will serve us as a single brief illustration of the difficulties which confront those who are trying to make democracy work. Certainly it reveals the difficulties confronting the leaders of the new education in the building of meaning and understanding.

We see, therefore, that we do not actually deal with the real world about us, but rather with a pseudomental world of ideas and beliefs. We respond to this pseudo environment as though it were real, our only possible adjustment being by means of the various substitute and partial meanings which we have invented for real people, real things, real actions. Our frictions, or stereotypes, are the very core of our beings, the defense of our position in society. As Mr. Walter Lippmann has put it, "We define first and then see."

Our minds tend to select from the culture around us new meanings which accord with those we have already formed. We see new situations in the light of the previously selected and stereotyped meanings with which we have viewed past situations. This is, of course, an economy in perception and understanding; but it presents the obvious and grave danger of cumulatively incomplete comprehension.

Social Co-operation AND THE SELF-DEFENSIVE INDIVIDUAL

Throughout this book we have noted the conflict between the current widespread regime of competition and the need of social co-operation. At the basis of the conflict is the psychological fact that most people, having been brought up in a competitive social world of egocentric persons, become more or less unsocial defenders of their own individuality. If this is thought to be inconsistent with our earlier statements concerning the social interplay of human beings, consider further the reciprocal interaction between the individual and the groups in which he lives.

On the one hand are successively changing small social groups assailing the individual with a multiplicity of stimuli; on the other hand is the individual, who responds with meanings to these stimuli and defends himself against the other self-centered aggressive egos in the groups. This he does by learning to develop along the same egocentric lines.

This interpretation of the individual as a protagonist of self is based on a vast amount of concrete investigation, partly of the behavior of preschool children. For example, the writer, in collaboration with Louise Krueger and Arensa Sondergaard, conducted studies of the personalities of kindergarten children. In one investigation, a study of the language of four-year-olds and five-year-olds, we found that more than two fifths of all their conversation revealed a naïve interest in themselves and their own affairs. Only one twenty-fifth of the conversation was an overt expression of the child's interest in the group. Most of the remarks were indicative of the trait we call "self-assertion"; that is, they showed a sense of personal power, self-display, injection of self into a situation, defense of one's feeling of ownership, resistance to interference, contradiction, commands, threats, and derision.

Through careful observation of children's development social psychologists and sociologists have traced this course of self-feeling. Cooley, for example, investigated the manner in which little children developed in their use of the pronouns "I," "my," and "mine." He concludes that the words do not represent to the child his visible and tangible human body but indicate rather a self-assertive feeling or attitude. "I," Cooley says, "is a social concept, the very essence of which is the assertion of self-will."

Speaking to the same point, the egocentric character of the individual, Robinson says in *The Mind in the Making*:

The little word my is the most important one in all human affairs, and properly to reckon with it is the beginning of wisdom. It has the same force whether it is my dinner, my dog, and my house, or my faith,

¹ H. Cooley, "A Study of the Early Use of Self Words," Childs Physiological Review, 1908, pp. 339-343.

my country, and my God. We not only resent the imputation that our watch is wrong, or our car shabby, but that our conception of the canals of Mars, of the pronunciation of "Epictetus," of the medicinal value of salicine, or the date of Sargon I, are subject to revision.¹

THE SOCIAL WORLD BUILDS IN MANY A SENSE OF INFERIORITY

Dr. Sigmund Freud and other students stimulated by him have thrown much light on this egocentric character of human response. Out of their investigations has come widespread agreement upon the nearly universal trait of "inferiority." Unquestionably most people reveal the development of this trait in their growth. It is, indeed, an almost inevitable outcome of the social pressure which molds individuals, especially in the years of childhood and youth. Human beings are guided almost continuously by two deep-rooted fears: the fear of economic insecurity and the fear of the social disapproval of their neighbors, employers, clients. Hence "What will the neighbors think?" plays a very large part in determining behavior.

So youth grows up assailed from every angle by economic and social pressure. Family, neighborhood groups, and community all co-operate in the everlasting endeavor to put each person in his place, and life tends to become a succession of episodes in conformity. Independence of thought is minimized; loyalty to the ideals of the groups is canonized; and as this takes place a sense of inferiority accumulates in each individual. The pressures from parents and from all those who are stronger, more vigorous, more dynamic, upon the less effective individuals inevitably produce a growing sense of inferiority. Constant reminders of dependence and inability in particular directions, the undervaluing of opinions, the ridiculing of questionings, and other forms of adult behavior, steadily tend to kill the child's self-confidence.

¹ James Harvey Robinson, *The Mind in the Making*, pp. 44-45. Harper & Brothers, New York, 1921.

Hence the Self-defensive Mechanisms

Of the many psychological concepts which Freud and other psychoanalysts have clarified, those which deal with the tendency of the individual to defend himself are perhaps most important of all. These psychoanalysts, by carefully recording examples of everyday behavior, have at last made the "self-defensive mechanisms" a matter of definite record. These mechanisms are so important in the learning processes of the individual that we should discuss them briefly. The researches of the past generation have produced five fairly distinct examples.

r. Rationalization. One form which self-defense takes is known as "rationalization." It is the tendency of the individual to give "good" reasons for the "real" reasons behind his behavior. He behaves in certain ways while wishing to appear to behave in other ways to the social groups about him. Hence he tends to make up explanations or justifications for what he does. In The Mind in the Making Robinson explains this trait, with an example:

I remember years ago attending a public dinner to which the Governor of the state was bidden. The chairman explained that His Excellency could not be present for certain "good" reasons; what the "real" reasons were the presiding officer said he would leave us to conjecture. This distinction between "good" and "real" reasons is one of the most clarifying and essential in the whole realm of thought. We can readily give what seem to us "good" reasons for being a Catholic or a Mason, a Republican or a Democrat, an adherent or opponent of the League of Nations. But the "real" reasons are usually on quite a different plane.

Consider two examples: (r) A boy has hurt his foot slightly. When the time comes for the hike of his boys' club, his limping has become more pronounced and he decides that he cannot go. After his mother questions him a bit, however, he admits that the real reason for not wanting to go is that he dislikes cooking over an open fire. (2) Two girls are overheard talking in a college

¹ James Harvey Robinson, *The Mind in the Making*, pp. 41-42. Harper & Brothers, New York, 1921.

hall. One of them is evidently much behind in her work. She has been invited to go to the theater and, upon debating with herself, decides to go. Her defense is "I am so tired that I know I'll do better work if I have some recreation."

As one writer described the self-defensive process, "Thousands of argumentative words are written to vent a grudge"; that is, our rationalizations are stimulated by attacks upon ourselves. Philosophy, ethics, and social science in general, according to Dewey, consist essentially of rationalization. Pareto, the Italian sociologist, agrees with him that social sciences are chiefly rationalizing. Also, Thorstein Veblen and other students have characterized politics as little more than that.

As we have already seen, we tend to reflect the temper and climate of the social environment about us, although we are not aware of doing this. Hence the real reasons for what we do, say, and believe are concealed even from ourselves unless we are made very conscious of this trait of rationalization. Day in and day out this process of supplying ourselves with high-sounding motives for our deeds becomes our principal indoor sport. And these motives we happily accept as true, without admitting or supplying the real ones to ourselves. Constantly confronted by a feeling of inferiority and hence constantly on the defensive, we try to supply reasons for our behavior which will best enable us to "get by."

2. Compensation. Closely correlated with this tendency to rationalize our behavior is that of "compensation," sometimes called "the sour-grapes philosophy." Indeed, it is frequently impossible to distinguish compensation from rationalization, they are so closely integrated. Studies of behavior show that between a third and a half of fairly well-educated persons reveal examples of this kind of defensive attitude against loss of self-esteem.

The tendency toward compensatory behavior reveals itself very clearly in an individual's specific desires to conquer felt inadequacies. It is, for example, the undersized, physically weak man who most often desires to be an athletic leader, while it is the social climber in the lower economic-social classes who craves a family tree. Allport has shown us that there are various ways

by which these individuals solve their problems. The weakling may compensate for his defects by building up inner, imaginative pictures of himself as the hero in physical combats. The social climber may similarly create an imaginary family tree with ancestors of glory and high social position. Another compensatory way of coping with a feeling of inferiority is to make up in effort what one lacks in ability; everlasting perseverance may produce as high attainment as sheer brilliance. Thus many persons of only average intellect achieve the highest of administrative positions.

G. Stanley Hall illustrated how

each bilateral organ compensates for defect in the other, one sense for another like touch for sight in the blind. Mozart had an imperfectly developed ear; Beethoven had otosclerosis; Demosthenes stammered and, as if mythology had recognized this law, many of the ancient gods were defective.... A man with a weak digestion becomes a dietetic expert in battling with fate. Little men walk straight; tall men stoop.¹

Allport refers to the undersized man who expressed contempt for the frivolity of modern dancing. But his real reason, although not known to himself, was that he could not bear the thought of dancing with girls taller than himself. Moreover, he walked with men that were either shorter than himself or very tall.

A shy boy presented a defense mask of being a recluse; it was, however, a compensatory adjustment which was misinterpreted as snobbishness, punished by unpopularity, and as a consequence led to still greater overcompensation.

There are many instances on record of phenomenal achievements by persons who, deficient in certain traits, overcorrect them because of the criticism of parents and elders. Witness the man who completed his college work in three years because his father had declared that he might not be able to get through even in five years, let alone four. In the same fashion persons sometimes develop habits of persistence, hard work, self-control, and

¹ G. Stanley Hall, "A Synthetic Genetic Study of Fear," American Journal of Psychology, Vol. XXV (1914), p. 167.

the like as compensation for the scornful, unbelieving attitudes of those about them.

Examples may be found on every hand of the manner in which young people develop traits of compensation. A fat boy in a play group was not expert in running games. Whenever possible, therefore, he suggested some such game as "hide-and-seek," having developed unusual facility in finding good hiding places.

Or note the exhibitionism of children who feel their sense of inferiority. The child with the greatest sense of inferiority often puts on the boldest front and rushes into the limelight.

In short, either we find a way of atoning for our weaknesses or deficiencies by rationalization, compensation, or overcompensation, or we take refuge from the real world in a world of fancy.

- 3. Substitution. Another frequent form which tendencies of self-defense assume is the substitution of another kind of behavior for a repressed or inhibited kind. For example, a person who is prevented from answering back to an economic or social superior vents his reaction in some other and available form of spleen. As Everett Martin put it, "He may kick the cat or fire his stenographer."
- 4. Projection. Still another form of self-defense is known as "projection." This is the practice of attributing one's own traits or responsibilities to others. An interesting example occurs in group gossip where, as someone has put it, "the scandalmonger may enjoy his own rottenness vicariously," attributing to others the meannesses and faults which he subtly knows to lie at his own door.

Groups exhibit this phenomenon of projection as well as individuals. No campaign, for example, is complete without the exchange of accusations about graft and other dishonesty by the contending parties. It is a fairly safe generalization to say that the party loudest in recrimination is the party most at fault. "Projection" is at work.

5. Escape. Closely related to rationalization and compensation is that way of behaving called "escape." Consider how few people accept their responsibilities in the social world and face the realities of their situations. Unable to react thus appropriately to actuality, they create and live in an imaginary world

of irresponsible pleasure. Escape in its most complete form, of course, results in delusions of insanity; then the individual lives entirely in a world of imagination.

Some investigators extend this concept of escape to include group escapes, and regard Utopian societies, experiments in socialized communal life, and the like as examples of escape mechanisms on the part of a very small percentage of people. Is this perhaps one of the chief reasons for the consistent record of failures which these groups have suffered?

Summing up. These, briefly stated, are the outstanding examples of egocentric self-defensive mechanisms of behavior. They reveal man responding to the intellectual, emotional, and social pressures upon him with a growing tendency toward defense of self. Thus the individual rationalizes, substituting "good" motives for the "real" motives of his behavior; he compensates for his defects; he escapes from realities and responsibilities; he projects into others the traits that he recognizes as deficiencies in himself; he is a bundle of egocentric self-defensive mechanisms.

Every educational worker, whether he be classroom teacher, curriculum-maker, or school administrator, must build his theory and his program with a view to serving such individuals as these. Society is essentially the interaction of unique individuals, it is true; but all individuals act in the light of such mechanisms as have been here described.

CHAPTER XVII · THE SCHOOL AND THE CULTURE: CONTROVERSIAL ISSUES

Can Man, Then, Really Be "Free"?

THESE GENERALIZATIONS about individual and social behavior have great bearing upon the matter of "freedom." We can see now that in the modern complex world no individual is really "free." Hour after hour, year after year, he is poured into the mold of existing family, neighborhood, and national culture. He becomes essentially what his psychological environment makes him — rebel or conformist, Fundamentalist or skeptic, protagonist of things as they are or devotee of change. This is not to deny the large role of inherited capacities for original invention. Because of them a few individuals of unusual initiative do break through the molding influences of the family, the neighborhood, and the other groups in which they live, reacting against certain aspects of the culture and perhaps succeeding in making some of them over. But the ingrained idea of the "free" individual, certainly as freedom was conceived of in the simple frontier world of earlier days, must be given up. The social structure today impinges heavily and inescapably on each individual life. Individual and society form a single integral organic structure from which no separate individual can escape to lead a "free," uninfluenced life.

Social Reconstruction and Indoctrination

The foregoing discussion of the social process by which individuality is formed throws clear light on the fundamental issue of "indoctrination." In recent years the educational press has been full of the pros and cons of this controversy. Perhaps the most vigorous protagonists of indoctrination among American educators are those who have witnessed the efficiency with which the Soviet leaders in Russia and the Hitlerites in Germany have used education to impose programs of action upon their respective peoples. These and other educational leaders tend more and more toward the position that we should effectively design a new society as these dictator-groups have done and "teach it" in the schools.

There are really two problems bound up in this issue. The first is the general problem of whether indoctrination does and must take place. The second is a very different one: Shall we design a new society and "teach it" in the schools?

Considered in the light of the foregoing discussion, the first is not really a problem; it is merely a matter of fact. If one studies evidence of the type we have just brought forward concerning the molding influence of the interaction of individual and society, the conclusion that the individual is "indoctrinated" every hour of his life is inescapable. Use whatever terms we will, — for example, molding, forming, influencing, or indoctrinating, — we cannot deny the far-reaching effects of this imposition by the face-to-face groups in which we live, by the nonpersonalized agencies of communication, and by the invisible, intangible climate of opinion which surrounds us. Thus it is, indeed, that the social heritage is passed on from generation to generation.

Shall We Design a New Social Order and "Teach It" in the Schools?

But the solution of the second problem is not so simple. It is, indeed, one of the most insistent and difficult issues with which we are confronted.

We have already noted the answer given by the leaders of dictatorship types of society; they have built up educational systems which have been established everywhere for the purpose of teaching the masses of the people what to think and what to feel. Deliberate and systematic use of the nation's schools to build a definite idea of and attitude toward the state was the ruling educational concept in Germany throughout the nineteenth century. This idea played an important role also in the formation of the French system of education and the perpetuation of that national culture. I myself have seen its great influence in the present regimented Fascist society of Japan. Still more recently Mussolini, Hitler, and Stalin have used it to fasten their particular types of social order upon the peoples of their respective countries. Here, indeed, are the indispensable tools of government in an undemocratic society. In a made-to-order society the schools, the church, economic and social organizations,—indeed, all institutions,—are used to bring members to the support of the national program.

But in a democratic society we cannot accept such a plan of coercion. As we have seen we confront two problems, that of designing a new economic-social system and that of developing in the masses of the population, at the same time, a sufficient understanding of problems and issues for the forming of intelli-

gent decisions concerning them.

If the democratic way is the way of "intelligent consent," then the route to it is clear — namely, through study and prolonged parliamentary group discussion. Intelligent group discussion can be achieved only by an interplay of minds, by the juxtaposition of different interpretations, and by group exploration of alternative courses of action. As Mary Follett has so well described it, this process of "circular response" is a process of interpenetration of minds in group discussion. It produces at its end point, not a compromise weaker than any single proposal, but an integration of meanings and emotions that represents a definitely higher, more complete, more adequate interpretation of the situation than any one person would be likely to attain by himself.

Hence we see how, even though we grant that culture is all the time indoctrinating, we can at the same time deny the position that to design a new society and "teach it" in the schools is desirable (and, indeed, impossible, except when carried out by a revolutionary government!). If that is what indoctrination means, then all who believe in perpetuating the democratic tradition in America will be unalterably opposed to it. Acceptance of that point of view is totally inconsistent with belief in democracy, for such a procedure is sheer "imposition." It negates freedom of speech, equal opportunity to impart all opinions (minority or otherwise) in group discussion; and it serves in the long run to limit the intellectual heritage to that tiny, infinitesimal minority who have dictatorial control over the lives of the rank and file. All-round development of either individual or group is impossible under such imposition. We cannot create a whole theoretical design for a new society and impose a specific course of action upon a people if we wish to continue the tradition of consent in a democratic society.

Shall We Have Controversial Issues in the Schools?

Two major generalizations have been established: first that the social world about us will inevitably impose attitudes, understandings, opinions, stereotyped convictions upon every one of us; second that it does not follow, however, that in a democratic society we shall use education to impose a specific course of action upon the people. These points now take us directly to a third important educational problem: Shall we have controversial issues in the schools?

Once again we have recourse to our fundamental postulate of government by the consent of the governed. If we decline to impose upon the people a specific "social order," if we desire to build "consent" upon the foundation of intelligent understanding, then there can be but one answer: There is no other way by which the democratic principle of consent can be carried on than the way of parliamentary discussion of contemporary issues and problems. And this way must be applied to every phase of social life — to what goes on in the family, in the school, in the

church, in the theater, and in all the group and institutional activities of the people.

Although this conclusion seems inescapable today, it was otherwise in the earlier development of American democracy. Educational leaders throughout the First Industrial Revolution thought very differently. They consistently refused to admit matters of economic, political, or social controversy to the schools at all. During the formative years of the American school system a no less respected leader than Horace Mann definitely refused to permit "the tainting of young minds with controversial matters." From that time to this most school administrators have avoided the discussion of alternative courses of social action in their schools.

In those rare instances in which educational workers or citizens of liberal views have initiated campaigns to build school programs around controversial issues, the climate of opinion in many communities has imposed a rigorous censorship. Moreover, on those unusual occasions when, in spite of censorship, sections of a community have sometimes succeeded in projecting certain issues into the educational cloisters, the dominant economic class of the community has tended to control their interpretation. The doctrines of American life have been dramatized with elaborate rationalizations and defenses. Issues have been warped. It has been assumed that schools were merely to pass on a particular interpretation of the heritage of American life. They were to teach youth the American ideal. The "American dream" was to be portrayed. But issues and controversial matters — these should have no place in the education of young people. To include them would be to imply that all was not right with this "best of all possible worlds," and to imply that was unthinkable. It appears, therefore, that we have little historical precedent for the current attempt to inject controversial matters into the school program. If that be true, then we shall have to go it alone; for certainly today we are confronted with the greatest social crisis of modern history. And the problems of that crisis can be solved permanently in no other way than by getting the people to confront the issues bravely and understandingly.

"Issues" Are the Nub of the Psychology of Consent

Confronted by the current impasse, educational leaders recognize that the school program, if it is to promote intelligent understanding, must be built around the study of problems and of optional courses of social action. All that is known of the psychology of learning is offended by any other procedure. Our current arid presentation of fixed and sure solutions to bygone problems has no psychological justification, nor, of course, is it good sociology. Consent based upon knowledge of only one aspect or side of a problem, upon the avoidance of controversy, is a travesty of both knowledge and democracy. The very connotation of "issue" implies uncertainty; it reeks with alternatives. It imposes the need for the consideration of many sides or aspects of a question to bring about thorough intellectual exploration and to produce needed changes of viewpoint. To keep issues out of the school program is to keep life out of it. Thus the known facts of the psychology of learning inevitably lead to the conclusion that the whole intellectual program of the school must be organized around issues if we are to carry on the democratic way of life, with its implied principle of intelligent consent by the masses of the people.

Moreover, the most effective way to bring the school program into touch with contemporary life is to organize it around controversial issues. If this were done, the teaching of history would be made dramatic and realistic. Professors of the social sciences have long defended history in the schools on the ground that it is necessary "to explain the present." But history in the schools has been largely a thoroughgoing record of the dead past; the present has almost never been explained, nor even described. "It is too controversial."

Nor has history ever been used to confront youth with alternative courses of action. But if the social sciences were organized about controversial issues, then the history that would be selected and taught would be relevant to present modes of living and problems. Contemporary problems would control the selection of content and its organization. Indeed, every step of curriculum-

making in the social sciences would be improved. Periods of history, episodes, events and movements, the personages and locale — all would be selected in terms of the psychological needs of young people today. In the same fashion the school library and all other sources of materials to guide young people in the social sciences would be more definitely related to present needs and conditions. Thus both from the standpoint of the needs of society and from that of the psychology of learning, the conclusion that much of the school program must be organized about controversial issues seems inescapable.

In bringing this discussion temporarily to a close we must recall the points which we established earlier: that, although we shall build the program of study about controversial issues, we shall never forget that the teachers in our schools are unique personalities; that, though they live in the molding matrix of American culture and have absorbed the American tradition, each will handle issues with his own unique interpretation of both the American tradition and the specific facts under discussion. But we shall reconcile ourselves to this fact. We shall know that, after all, if we attempt to perpetuate the democratic method, we must accept its necessary limitations, especially the limitation that parliamentary discussion is slow and meandering and wasteful. In times of crisis it may even become dangerous. Nevertheless it is the only course by which democratic consent can be produced among the general population. Thus we shall protect teachers' rights as unique individuals in a democracy to hold their own specific views and to exercise freedom of speech in discussion. But we shall claim the same right for every child and every parent in every community throughout America, as well.

The True Role of the Educator: Leader in the Study of Society

Are we not now in a position to see more clearly the true role of the educational worker? The current years of drastic transformation of society and of widespread yearning after social reconstruction present the educator with several options concerning his social action. He can dare to "help build a new social order" and to "teach" its concepts and loyalties in the schools. Or he can heed the economic fraternity of his community, which says that he must teach according to the pattern of the prevailing climate of opinion, that he must not participate in social criticism and reconstruction. Or there remain other possibilities. He can, for example, present the concepts and loyalties both of the new social orders and of the prevailing climate of opinion, not "teaching" any one at the expense of the others and leaving the students as much intellectual freedom to make their own choices as is possible, human prejudices being what they are. Which shall he do?

The problem of the educational worker is complicated by the fact that he is at the same time both private citizen and public servant. As an especially intelligent and informed citizen of integrity he should participate actively in the criticism and the rebuilding of the social order; he must "help build a new social order." In doing this he may be compelled to align himself with one sector of the community and hence to oppose others. But as a public servant in charge of education his obligation is to no particular sector. On the contrary, it is to the total community, and he can serve this heterogeneous company only by constantly maintaining his position as a comparatively objective student and a fearless critic of our contemporary culture.

The educator's supreme function as educator, therefore, is to lead the community in the study of society. This means that he must guide both adults and young people in the critical analysis of conditions and of proposals for reconstruction. Teaching the crucial issues of changing social life by means of parliamentary discussion, he tends to build a science of society into education. Thus one of the chief attitudes or loyalties to which he shall constantly devote himself is the building of "the scientific attitude of mind."

This loyalty has a peculiar interest during the current impasse of industrial society. To what creeds, for example, shall the citizen subscribe, confronted as he is by the possible collapse

of our economic-social system? Society is now dividing itself into two groups: the protagonists of things as they are and the protagonists of social reconstruction. The defenders of the status quo maintain that the economic system is in the grip of inexorable "law"; that the recurrence of "business cycles" is inevitable: that we are now in the trough of one of the worst of depressions, but that all we need to do is to hold fast, produce. buy, spread confidence, and we shall recover. They hold, therefore, that the individual must be prepared to make the necessary personal adjustments to keep the economic-social system going. The other group, however, holds that the economic problem has become one to determine the physical needs of the people and the physical resources of the country, and then to set up a system which will produce the necessary goods and distribute them to all the people. Thus one group would perpetuate the existing system, even to the point of making people change to fit into it: the other group would, if necessary, change the system to fit the needs of the people.

In the midst of this controversy there is only one possible position for the citizen and especially for the educator. He must inculcate day in and day out the attitude of critically studying the system, its historical development, the factors that produced it, the most objective exhibit that can be assembled of its resources, its productiveness, its weaknesses, and its excellences. One supreme loyalty will emerge from such a point of view—that of following the facts to their inescapable conclusion, whether that conclusion be to perpetuate the existing order or to reconstruct it drastically. On no other basis can a humane and democratic society be permanently founded.

With this one illustration we have shown the true role of the educator, namely, leading the community in the study of society. Moreover, this study should be as scientific as possible, allowance being made for the frailties of human nature and the indoctrinating character of the social world. This can be done only by building the school program about controversial issues and by keeping those crucial issues of changing social life ever in the forefront of discussion.

CHAPTER XVIII · THE PSYCHOLOGY OF CONSENT: DEMOCRACY AND THINKING

The Current Difficulties in Understanding

AMERICA IS attempting to carry on her great experiment in democratic government under the most hampering conditions: a heterogeneous congeries of people of less than eighth-grade education, sprawled over a huge continent of nearly twenty thousand communities, huddled in towns and cities, existing on a bare living wage, and engaged primarily in the quest for food. Furthermore, many of them are totally ignorant of and indifferent to their collective affairs.

To transform her current competitive regime into one of farreaching social control by means of the democratic process appears impossible to achieve in a short time at this juncture. It is evident that the problem is a long-time one, especially since intelligent consent implies a large degree of understanding on the part of the people.

The task is complicated not only by the obstacles of physical geography and the diversity of the racial, national, and regional make-up of the people, but also by the fact that, in our Great Industrial Society, words have come to play a new and dictating role. Goods are produced for deferred consumption in remote places, and their exchange is put on a verbal basis; the reaches of the law of contract have multiplied to undreamed-of ramifications; the press, the radio, and other agencies of communication domineer over the group mind.

Furthermore, the mind of Western man has produced in the past four centuries a horde of subtle ideas far outnumbering the words which have been built up to express them. Today the educated Euro-American has perhaps twenty thousand words at his command, but with these words, numerous though they appear to be, he is compelled to convey millions of meanings. The task of conveying meaning has outrun articulation. If you have any doubt about it, ask the next six persons you chance to meet what the concept "democracy" means to them!

Not only has meaning outrun articulation, but also minds encounter special difficulty in communicating in this day because, with the territorial scattering of our population and the devastating urbanization which has paralleled it, the *printed* word has usurped the role of oral speech. In a simple society communication is direct and personal, but in a complicated one it is devious and impersonal. Not so long ago communication was essentially by word of mouth, face to face; but now the vehicle of understanding for half the world is either the printed word or the long-distance telegraph or the wireless. As this has taken place, communication has lost its physical and emotional qualities; it has become impersonal, and cleavages and misunderstandings spread apace.

As a result, the whole continent is ablaze with the impact of different groups, and in this respect it merely reflects the contemporary order in other countries. Misunderstanding, suspicion, friction, pervade the social life of peoples in many parts of the world. The successive decades of political and economic history have been characterized by the realignments of sections and groups. The contemporary order reveals the same division of our people into cliques: Proletarian worker against capitalist owner...Protestant against Catholic... Producer against middleman...Black against white...Industrialist against farmer...Jew against gentile.

Now it is clear that, although understanding is the basis of social life in a co-operative order, it is a basis that is as yet only rarely achieved. Two personalities can achieve understanding only when they have evolved an elaborate common background of meaning. The gulf between them must be bridged by a system of unique names of the facts and relationships of living together, and to erect this requires many interpenetrations of mind.

"Do you understand me?" asked Robert Louis Stevenson after a night's argument with his friend, and concluded: "God knows! I should think it highly improbable!"

Stevenson and his friend were speaking face to face and were utilizing all the channels of understanding. The conveying of meaning was three-dimensional — the bare words were given depth by a shrug of the shoulders, a smile, a gesture of the upflung hand; articulation was dramatized, clothed with meaning. Yet communication between masters of language had reached an impasse.

If, therefore, we have no assurance that words uttered by a person will reproduce more than a bare approximation of his meaning in his hearer's mind, how much more difficult for groups or nations to understand one another! Wars are made, great crises brought on in business and foreign affairs, because of confusion in meaning. Episodes of misunderstanding fill the diaries of current events. The foreign minister speaks to nations, uttering meanings unique to his intent and experience. His words, passing through the variegated meshes of the press, create connotations, passions, enthusiasms, prejudices in millions of readers which in large part are foreign to the meaning he sought to convey. What assurance is there that even approximately the same meaning will be taken from the pronouncement of the speaker of the evening by more than a handful of an audience of a thousand educated men and women? You walk out of a political rally, educational lecture, sermon, intercollegiate debate, your ears dinning with the contradiction of approval, flat denial, agreement, critical questioning, unhesitating belief. The same set of words, falling on ears tuned to a great range of sensitized backgrounds, biases, appreciations, produce variations of meaning through the whole gamut of interpretation.

Some of the causes of the difficulties of communication and of the inadequacy of the current educational program may be summed up, therefore, as follows:

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- 1. The sudden rise of a complex, interdependent social life.
- 2. The scattering of the people over a vast territory.
- 3. The rapid concentration of people in cosmopolitan cities.
- 4. The decline of personal, face-to-face speech and the use of long-range, impersonal agencies of communication.
- 5. The increasing resort to the printed word.
- 6. The enormous diversity of language and social backgrounds and economic interest in the population.
- 7. The educationists' lack of understanding of the psychology of meaning.

We have now reached the point in our study at which we must think clearly through the process of building consent. As the earlier argument showed, if government is to be based upon the consent of the people it must be founded upon understanding. Understanding is, therefore, the great goal of intellectual education,—understanding of one's world, of one's fellows, of one's self,—and the task of the educational worker is that of building a program of activities and materials that will develop a common body of meanings in the minds of 28,000,000 young Americans. To do that we must become students of the psychology of understanding.

What, Then, Are the Psychological Constituents of Understanding?

To "understand" a situation is, variously,

To grasp its significant meaning.

To identify its elements.

To know what the facts in it signify.

To see the relations among its important aspects.

To detect its central ideas.

To be able to think through the problem it presents.

To be able to generalize, or draw inferences from, its data.

To evaluate its importance.

To adopt appropriate attitudes.

Such an elucidation of the concept of "understanding" makes use of several groups of important and related psychological terms:

- 1. Meaning, idea, fact, data.
- 2. Seeing relations, problem, thinking, generalizing, drawing inferences.
- 3. Significance of facts, value.

The situations of life vary, of course, from the simplest routines to the most complex and novel social experiences. Examples of the daily routines are dressing, eating, walking, following simple directions — such as "Turn left"..."Drive on the right"..."Telephone your home at once," and the like. In these, understanding involves little more than direct perception: one hears or sees a familiar word or phrase and acts; he identifies an object by name and function; he reacts with the appropriate bodily movement or simple mental association.

Very different are the subtle emotional situations in which the most precious human values are at stake. They include, for example, making important decisions in individual and family life; taking stands involving personal risk, assuming positions on current critical economic and social issues — even aligning oneself with unpopular movements; responding appreciatively to subtle aesthetic situations; and a host of variations of these. On these levels response is complicated indeed; it is no less than a fusion of meaning, reasoning, habitual tendencies, gestures and other bodily movements, attitudes, and loyalties.

Thus we can distinguish fairly clearly certain elements involved in understanding:

- 1. On the simplest level: acquiring facts and information that is, getting meanings and making habitual responses, taking appropriate bodily and mental attitudes.
- 2. On a somewhat more complicated level: all the foregoing plus recognizing and solving problems, thinking, reasoning, generalizing, seeing relations, with corresponding "scientific" experimental attitudes.
- 3. On a still more complicated level: all the foregoing plus attitudes of weighing values, making practical personal decisions, predicting future events, estimating probable outcomes.

And operating on all levels and in every situation are the desires, motives, and fears of the individual. What does he want most from a particular situation? What does he fear as possible outcomes? What is his motive?

Meaning and the Active, Integrated Character of Experience

To catalogue these psychological constituents of understanding in this fashion does not imply that they are neatly distinguished as separated traits. On the contrary, as we have already seen, they are fused inextricably together in a continuing, ongoing stream of human experience. So tangled are the psychological threads of the warp of experience that, even after half a century of scientific and philosophic study, their organization is not clear to us. How they are interwoven, how they work together, what each one contributes to intelligent human response, we do not know. What, for example, are the respective roles of ideas and motives, of generalizations and attitudes, of opinions and beliefs? We do not know. Which acts first to launch and propel behavior, - an idea or an attitude? We do not know. Which elements play the determining part in directing the succession of acts of overt behavior, - intellectual or emotional elements? We do not know. There is, indeed, great disagreement among the various "schools" of psychologists as to the organization of the constituents of mental life and their operation. But that they are dynamic, not static, and that they are fused into one organic response, all are agreed.

Understanding Requires Ability to Think about Situations

Our discussion thus far gives us four cues for the new educational program: it must postulate (1) an active child, (2) a self-defensive child, (3) an inductive approach to learning, and (4) a whole child in action.

But the education of human understanding requires more than an alert, organized individual trained to acquire meaning from books, lectures, motion pictures, radio, or even travel. He must have not merely a curious, absorptive mind, but a critical, reflective mind as well. For problems can be grasped, let alone solved, only by the exercise of reflection. We need to consider next, therefore, the "psychology" of thinking. To do so let us carry farther our analysis of the process of meaningful response.

The Tendency toward Impulsive Behavior: the Reign of Habit

First let us remind ourselves of the fortunate (and dangerous!) circumstance that the human being is both constituted by nature and practiced by his social environment to respond to any situation "on impulse." Some examples from everyday life will dramatize the fact that most behavior is essentially the process of "stimulus and immediate response."

- 1. A pedestrian steps in front of a speeding motorcar . . . the driver jams on the brakes and sounds his horn, "without thinking."
- 2. Water is about to run over the top of the basin . . . "automatically" the hand goes out and turns it off.
- 3. The touch and go of conversation also illustrates the impulsive stimulus-response tendency of social behavior. A smile on one face tends to load meaning with liking, and to arouse a corresponding facial gesture and word response on the part of the other person. Conversely a frown, high-pitched angry tones, aggressive gestures, produce tension in the other and a characteristic defensive reply. The tendency is toward immediate response to the directly perceived situation; that is, we "go off" without "thinking."

Similarly the uncritical student, only partially informed, tends to accept the evidence and the argument of each persuasive writer, even though a succession of them leads him to contradictory conclusions.

Little wonder that William James was led to characterize human beings as "mere bundles of habits." Indeed, most of

daily life reflects the habitual impulsive character of response. As we rise in the morning, we feel the dullness of the day, the wet east wind, or the coolness of the atmosphere, and we respond by putting on a heavy suit or dress. We look at the overcast sky as we leave the house and take our umbrella or raincoat. Riding into town on the "Central," the headlines in the Times arouse in our suburban neighbor the instant generalization "These Reds should be jailed or deported." The reading of the financial page shows us that "American Tin Can" is still falling, and we respond, "I must sell today." But these latter types of reactions are as impulsive, as uncritical, as unreflective as our reactions to the weather or to physical dangers. They all tend to be habitual responses cut on a familiar pattern—the businessman buying and selling, the family discussing current politics or the season's styles in clothing, the Senate discussing proposed legislation. This amounts to saying that much of life is routine, that for most people most of the time life is one habit after another: reaction is in accordance with familiar patterns or formulas.

The fact that people are bundles of habits has great value for economy of living. Fifty years' scientific study of "habit" establishes clearly the predisposition of the individual to respond to a familiar stimulus in approximately the same manner as he has done before. And the new school, even better than the old one, capitalizes this psychological law. For, as a famous drill-master once exclaimed: "Habit a second nature? Habit is ten times nature!" And the educator utilizes the principle in building his program of activities. He reduces as much of learning as possible to repetition, and practices the learner in it by the most economical and effective methods.

Who can doubt that the numerical stimulus "8 plus 7" should always call forth the undelayed, definite response "15," that "pi" should invariably mean "3.14159," that "London" should orient the reader with a definite location on the earth, that the spelling of "house" should never fail to call forth h-o-u-s-e, that to back the car the reverse gear should be thrown forward?

For economy and effectiveness of living all these responses must be reduced to habit. Herein is the challenge to a sensible building of the educational program in the "skills."

The Danger: We React to the Familiar, Not to the Significant

But our concern here is with the deleterious effects of habit, not with its positive contribution, important though that is for general education. The predisposition of the individual to become a slave of habit leads him to respond uncritically to any situation with the first meaning that comes to mind. The make-up of the nervous system and its close integration with the glandular and muscular systems tend to bring that about.

This is as true in the complex social situations which we have described as in the simple routine ones which call for direct perceptual response. The tendency is to accept as the cue to response the first suggestion which flashes up and to act upon it immediately. Each social situation presents a complex of elements — the physical appearance of the other individual, the "look in his eye," his gesture, his words, the intonation and accent of his voice. All these are shot together in a fused ongoing process which is constantly being made over, diverted, or reinforced by his interaction with the other person. Each person responds to the total pattern or configuration of the situation in this give-and-take process. But the total pattern always takes on for him a unique organization, and he "impulsively" selects. without being aware of his selective process, one particular meaning to which to respond. Even though the situation could arouse many possible responses, he picks one and acts on it as the "cue." Some single phrase, in conjunction with the integration of gesture and voice and with meanings that are passing through the other's mind at that moment, may set off the response.

But whatever is the cue, we tend to respond with the act, word, gesture, what not, called out by that particular fusion of familiar elements. Thus the habitual reaction is to the familiar

cue, not necessarily to the *significant* or the appropriate one. For in all but the routines of life each situation might call up many possible optional responses — only one of which is the right one. And this is the psychological nub of misunderstanding. For with the enormous individual variations in experience, and hence in meaning, and the infinite permutations into which social behavior can fall, every social situation is loaded by chance as well as by human predisposition with the *likelihood of reacting* to the wrong meaning. Witness the circumlocutions, therefore, of cautious thinkers: "If I understand you correctly"... "Assuming that you mean this"..."On this assumption I think so and so"... and the like.

But the Need Is to Find the Significant Meaning or Relationship

To state the almost universal propensity of human beings to follow the path of least resistance is really to set out the chief intellectual task of education. This is to practice people in taking thought by inhibiting impulsive responses. Intelligent understanding demands that we react to the significant meaning in a situation, not necessarily to the familiar one. The familiar one may or may not be the significant one, and our task is to delay response long enough to analyze the situation and to find the most significant, the most appropriate meaning. In popular parlance we say "Stop and consider"... "Pause and decide"... "Think it over"... "Make up your mind." There are two crucial points in these descriptions of our mental activity. The first is the delay in response, and the second is analysis of a situation by means of comparison of point with point.

Types of "Thinking"

To make the significance of these steps clear, we must explore farther what is meant by "thinking." The term is used variously to describe many different kinds of mental activity. Note our use of it in everyday language: "I think I will go by auto"...
"Think of that"..."Think it over carefully before you decide"
..."I think we turn to the right here."..."As I sat thinking about nothing in particular." Psychologists as well as the manon-the-street have used the term with diverse meanings. If one studies these, he can find not less than four distinct senses in which it is used:

- 1. Empirical, impulsive, trial-and-error sorts of thinking.
- 2. Casual, tangential, associative types of thinking, sometimes called "reverie," "daydreaming," even "mind-wandering."
- 3. Rationalization of one's behavior, referred to in Chapter XVI as a self-defensive response.
- 4. Scientific thinking.

AN EXAMPLE

Consider an example from the current economic-political scene, one that will illustrate all these four types of thinking, especially the first and last ones. Two teachers of social science are listening with their students to one of the President's radio broadcasts on the status of the recovery program of the national government. One of these is essentially an "empirical" thinker and is to boot a partisan defender of the administration. He is charmed and warmed by the attractive voice and diction of the President, and is predisposed toward accepting the latter's pronouncements.

The key to the President's message (which is, of course, in part an example of self-defensive rationalization, the third type of thinking on our list) is that the nation is on the way to recovery because 4,000,000 unemployed workers have been put back to work. The empiric accepts this as correct as stated, feels the implication that the depression is about over, and feels a warm glow of added security for himself. He questions neither the accuracy of the President's statistics nor the implied casual relationships (1) that these unemployed were put back to work as a consequence of the acts of the administration and, more important, (2) that this means that the nation is on the road to recovery. He accepts the pronouncements partly because of his partisan faith, partly because he wants to believe that prosperity

is coming back, partly because it's the path of least mental effort, partly because he lacks facts concerning the economic situation, and partly because the implied connection between re-employment and recovery is at first glance plausible. He is an empiric and a worried egocentric individual, and the "facts" as the President presented them fit into the way he wants things to turn out.

The second teacher is not a partisan of the administration, is much more scientific in general attitude, and is a careful student of the economic-social scene. He listens to the broadcast with frank admiration and warm appreciation of the President's charm, friendliness, and cultured ways, with an inquiring point of view, and with eagerness for new facts and trends of the distressing situation which confronts the world.

His reception of the statement concerning re-employment is very different, however, from that of the other teacher. He asks:

- r. Are the facts of re-employment correct? Perhaps; but they are probably colored by the partisan attitudes of those who gathered them.
- 2. Is 4,000,000 as large a proportion of the 16,000,000 to 18,000,000 unemployed in 1933 as we could expect of the program followed? Again perhaps; but it seems small for the fifth year of depression conditions.
- 3. What are the factors that might have put these people back to work?

 (a) Improved confidence of the people? Yes. Did the administration bring that about? Yes. (b) "Made work" public works etc.? Yes. (c) "Relief" money paid out by the administration and used to stimulate buying? Yes. (d) Reducing hours of labor to forty per week? Yes, perhaps; it may have had a very slight effect. (e) Plowing under and otherwise restricting production so that prices would go up? Very doubtful what effect it had. Really no one can tell definitely.

But his mind opens also to many other aspects of the total problem. He asks:

4. What factors would have put many men back at work anyway? Was it partly inevitable in the fifth year of the world's worst "depression"? Yes.

5. What are the factors that have not been considered tonight? He notes a long range of them — for example, increasing productiveness of machine industry, needs of the people for more goods, relations between wages and prices. He asks: "How high a purchasing power among the people is necessary to buy the goods produced? Will \$12 a week do it? What has been the effect of the codes on capital's and labor's bargaining powers? Etc.?"

We have only begun to open up the consideration of the question as the second teacher attacked it, but we have gone far enough to point out the significant differences in types of thinking of these two individuals. Whereas the first was an empiric, a rationalizer, and a routinist, the second was much more "scientific." What does that mean? Several things.

First he had an "open mind"; it was not made up. He was willing, indeed eager, to listen, to get more light on the baffling social problem.

Second he was critical of statements made, data given, and generalizations drawn from them. His mind was not "open at both ends"; an idea could not go in one end and out the other. Once in, it was subjected to scrutiny, measured, evaluated with others, and accepted only if it fitted the needs of the situation. He did not accept the first plausible idea or the generalization as fitting on first glance or hearing. He waited, inhibited the first impulsive response, compared the suggested idea or relationship with other possible ones, and accepted the ones that, in the light of this more mature "thinking," now seemed to satisfy the demands of the situation. In short, he avoided the familiar and the plausible and sought to find the most significant generalization from the given data.

Third even the generalizations that he drew from these expanded data were held to be tentative. They were regarded as new "hypotheses," that is, as generalizations drawn from the best-known facts; but they were merely good hypotheses and as such must be reconsidered as time passed and new evidence accumulated.

The Goal: Scientific, Not Merely Empirical, Thinking

This is the essence of "scientific" thinking and is to be sharply contrasted with either empirical thinking, rationalization, or the free association of reverie. It is, indeed, the goal of intellectual education. Not long ago I witnessed an episode that sets forth with startling clarity that great end.

While studying the curriculum of the Denver public schools, I went one afternoon with the superintendent to the North High School. As we entered the building, two boys, apparently fifteen or sixteen years of age, passed us, absorbed in intense discussion. Dressed in sweaters, with hair rumpled, they were evidently returning from a strenuous hour of basketball in the gymnasium. My attention was called to them by the animated argument in which they were engaged. As we passed almost shoulder to shoulder, one of the boys suddenly stopped, shook his forefinger at the other, and said smilingly, "Fred, your point is well taken, but what is your authority?"

I gasped and inquired of my companion if we had witnessed a typical product of instruction in the Denver schools. He sighed and said he wished he might think so. It certainly was a fine ideal, but he feared that other agencies had been training these boys in deliberative argument.

Your point is well taken, but — What is your authority?

Tolerant understanding and critical questioning — two great ends of intellectual education.

Willingness to listen, openness of mind, confidence that the other fellow may have a point — this attitude of mind is needed more in America today than almost any other. But not only openness of mind — flexibility too. The open mind must not be a drafty one. The outcome we seek is nothing short of a mind informed and trained to withhold complete acceptance or denial until the evidence is in. A mind willing to listen, but also critical

of arguments and evidence. A mind that denies acquiescence or rejection until it is sure; that habitually questions: "What are the facts before us?" "Where did they come from?" "How reliable are they?" "What is the faith of their sponsor?" "Have we all the facts?"

Is there an aim of intellectual education more important than the development of tolerant understanding and of the habit of critical questioning?

Another Note on the Egocentric Character of Our Responses: the Role of Wishful Thinking

In the example given (pp. 316-319), the influence of the individual's desires on his thinking was referred to. The meanings to which the first teacher paid attention, the generalization he accepted, were those that described the situation as he wanted it. He wanted times to get better; he wanted to feel safe, to know that he was in no danger. He feared the consequences for himself and his family if the depression continued. Hence his whole mind-set favored acceptance of the President's statements and conclusions.

His "thinking," therefore, was not only empirical, "soft," superficial; it was downright "wishful." It was close indeed to the third type mentioned in the foregoing list — rationalization. This self-defensive mechanism of giving "good" reasons rather than "real" ones for our points of view and our behavior we referred to in Chapter XVI. Nevertheless it plays such an important role in our daily lives that it will bear repetitive emphasis. In fact, careful study of everyday life is convincing us that "wishful" is a better characterization of the thinking of the man-on-the-street than any other description. It is what he wants most that determines which meaning is most potent in a situation, that governs his personal approach to his fellows; it determines whether he cajoles or threatens, is acquiescent or defiant, friendly or unfriendly, open-minded or intolerant. Not that the individual consciously and deliberately analyzes each social situation and by a step-by-step analysis decides what his

response is to be. On the contrary, complex situations succeed one another kaleidoscopically; second after second we respond with meanings in the physical frame of smiles, frowns, signs of annoyance or pleasure, tolerance and sympathy. We react in each situation in terms of what we want from the situation. There is an instantaneous evaluation of our need, and our response is framed spontaneously in terms of it. Much of it is naïve, unimpeded, almost reflex. Indeed, only when we actually recognize that we are facing a social crisis with our fellows do we deliberately confront the situation as a problem to be analyzed. And even then what we fundamentally want motivates and colors the character of our response.

The Heart of Scientific Thinking

1. TREATING SITUATIONS AS "PROBLEMS"

The contrast projected by our example of the two teachers suggests that other psychological concepts be brought into our study. The central ones are (1) treating situations as "problems" and (2) detecting significant relationships. One way of distinguishing the two teachers in our example is to say that, whereas the second teacher reacted to the radio broadcast experience as a "problem" and hence as something to be reasoned through and generalized about, the first one did not. What is the real significance of these distinguishing concepts?

In one sense every social situation is a problem, for no two social situations can be exactly alike. Each is a unique integration of familiar and unfamiliar elements, and hence theoretically can be responded to only by some amount of reflection or reasoning. But in saying even that much we have implied another new psychological concept, namely, analysis. Let us clarify that meaning a bit.

Refer again to the characteristics of the second teacher's reaction — that he did not accept immediately the validity of the data and the conclusions of the President (that is, he delayed his response); that he sought to distinguish options, to criticize

suggestions, and to weigh and evaluate them. Taken together, these constitute the process of analysis: confronting a novel situation with an attitude of "suspended" judgment, drawing tentative (hypothetical) conclusions, testing these by comparing them with the needs of the situation and with other suggested conclusions. In fact, the very essence of "scientific" thinking is to treat a situation as a "problem."

What, then, is a "problem"? It is, for any given person, at any given time, any situation that must be thought over, reflected about, considered, and weighed if effective behavior is to ensue. It is any situation to which response must be delayed, cannot be immediate, "on impulse"; one in which the individual is blocked in his tendency toward impulsive response, in which he recognizes alternatives that must be compared. It is clear, then, that there is no inevitable parallelism between a "problem" and a "situation." What may be a complicated problem to one person, holding him up, even defeating his immediate responses, may call forth in another an easy, glib, or even automatic reaction. Moreover, what is originally a problem to a person becomes through habituation a simple routine, to be dealt with by direct perceptual response.

Of course, in one way and at one stage of the individual's development, all situations are "problems." Learning to catch a ball, to operate a motorcar, to speak or read a foreign language, to find one's way about a strange city, to play a piano - all these, in their initial stages, constitute "problems." But "practice makes perfect"; the repetitional confronting of any one of these, time after time, reduces the strange, the unorganized, the confused, to the familiar, the organized, and the plain. Gradually one's physical and mental habits are tied together in the right sequence and grouping to enable meaningful reactions to be made more promptly. Eventually they drop below the threshold of awareness. We reach the point, with the bodily skills, at which we say we "do them without thinking"; our habits "take care of themselves." And the same thing happens with verbal problems — that is, in exchanging ideas in conversation and discussion. We organize our responses in terms of familiar "patterns"

of thought. And we tend to respond with these patterns. This characteristic of mental life has been illustrated concretely in Chapter XVI in the discussion of stereotyped ways of thinking and behaving, and the reader is urged to turn back to it at this point.

This, then, is one essential of scientific thinking — to treat every novel situation as a "problem."

2. DETECTING SIGNIFICANT RELATIONSHIPS

That brings us to the second essential — that is, detecting the most significant relationships in situations. This is the goal of analysis; this, indeed, distinguishes the scientific thinker from the mere routinist, the empiric. Seeing relations between two connected things is the crux of understanding.

Consider some examples from economic life:

- 1. It is the relation between what a worker produces and the share of the social income that he receives for it that is the significant relationship not the mere fact of productiveness or of a given per cent of the price of goods.
- 2. We can learn the fact that "fixed charges" are written into school budgets before teachers' salaries, and the fact that school-board members are essentially representatives of the propertied class; but it is the recognition of the relation between them that is the desideratum of social action.
- 3. We can learn the fact that new laborsaving engines and machines are being produced with accelerating momentum, and the fact that unemployment is increasing even in times of prosperity; but it is the relation between the two that we must try to grasp if we are to understand the contemporary economic scene.
- 4. Similarly, if we are to be intelligent citizens, we must not rest until we discover such relationships as
- a. That (if any!) between gold supply and credit extended to the people.
- b. That between prices paid for farm products and wages received by the general working public.

- c. That between the circulation of newspapers, the quantity and character of advertising, and the political-economic faith of the owners of the press.
- d. That between the danger of recurring warfare and economic imperialism.

Finding the answer to any "why" question consists essentially in finding significant connections or meanings, and it is the "why" rather than the "what" or "where" or "when" questions that produce reflective thinking.

So it is practice in detecting significant relationships that is the essence of a good intellectual education.

Reducing Our Bewildering Modern Society to Meaningful Order

The role of the constituents of understanding can now be seen in relation to the facts brought out in the story of modern industrial society. Recall them as applied to any situation: to identify its elements, to grasp its meaning, to detect central ideas, to see relations between its important aspects, and the like. But the scope and intricacy of meaning that confront the person who tries to understand our current culture are so vast and deep that they stagger even the well-informed citizen. Certainly the buzzing confusion must be simplified, reduced to some degree of meaningful order, if the current conditions and problems of economic-social-political life are to be grasped even by a small organized minority of the intelligent population.

THE PROCESS OF GENERALIZATION

Happily for the future of democracy Western man has produced an intellectual method of synthesis which may enable him mentally to keep pace with the mounting complexity and confusion which the new world presents. That is, he has learned how to generalize details, to sum up the minutiae of social life in compact meanings. Consider some examples:

The little child learns to react with meaning to "cart," "wagon," "automobile," "train," "locomotive," "steamboat," "airplane." Each of these is built intricately into his experiential background of understanding by a multitude of practical and verbal activities. Steadily as he matures, however, the adults about him teach him to generalize these details, to use a general "class" concept with which to deal with their characteristics en masse — namely, "transportation." By the time he is in the intermediate school, at the age of ten or thereabouts, he deals intelligently with the concept "transportation."

Similar is the recognition of the interrelationship between the meanings "man using his muscles," "horse using muscles," "steam in an engine," "wind on turning wheels," "moving water on turning wheels," "gas exploding in an engine," "electricity," "electric generator," and many others which lead to the understanding of the general concept "power." Eventually (by postadolescence at the latest) a sound education would enable a youth to think as quickly with this concept as he did earlier with the detailed meanings learned in building it up.

Thousands of these generalized meanings, which we call "concepts," are built up in the learner's mind; and in adulthood he thinks with them as easily as in earlier years he thought with "cart," "train," "boat," "water," "wind," or "windmill." To name at random a few that are crucial to clear thinking about the social order: interdependence in modern life, industrialism, machine technology, private ownership, corporate control, standard of living, competition, laissez faire, economic nationalism, government based on consent, growth of population, experimentation with democracy, the "American dream," the scentific study of social life, competition versus social control. Certainly the really educated person manipulates these apparently abstract ideas as easily and clearly as the uneducated one does the ultraconcrete details that contribute to them.

These are all generalized meanings; that is, each is a synthesis of many detailed meanings. They are all generalizations of definition, however. To explain any one we should specify certain illustrative significant details; for example, an engine

is...; power-driven engine means...; interdependence is that characteristic of social life that...; etc. These generalizations of definition are very important for understanding; in fact, understanding of the modern social order cannot be developed without mastery of them.

But there is another equally important kind of generalizing—namely, that involved in stating the essential relationships underlying the crucial conditions and problems of modern life. We have already seen that this is the very crux of scientific thinking. But that amounts to saying that the process of generalization is also an essential element in scientific thinking.

Consider a simple case in the task of understanding community life which confronts young people. Among the thousands of facts about the communities of men and how they grew are many that deal with the question Why do cities grow up at certain places on the earth? Now it is manifestly wasteful, indeed impossible, for any individual to memorize the myriad details about the location, geographic conditions, people, occupations, standard of living, government, philosophy, and the like of any large number of individual cities. There is, however, an economical way of generalizing these details so that the mind can grasp the significant facts and relationships of community life and can be in a position to use these generalizations in thinking about community life and its betterment. Take a simple illustration.

We can say, for example, that Boston (and New York, New Orleans, Antwerp, Shanghai, San Francisco, and so on) is a port city. Boston (and the other cities) has a large trade with other ports. Boston (and the others) has a good harbor. Boston (and the others) is located well with respect to other ports. Boston (and the others) has a good hinterland.

The foregoing are statements of existing facts. They are found on investigation to be true of port cities. From these, therefore, a number of generalizations can be drawn. For example, an inclusive generalization is the following: Cities grow up at ports which have good harbors, rich hinterlands, and are located favorably for trade. Or several more specific generalizations can be made; for example,

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- Cities grow up where good harbors are connected with rich hinterlands.
- 2. Cities grow up at good trading points.
- 3. For cities to grow they must be well located on important lines of transportation.

Or even more specific generalizations could be drawn from existing facts implied in some of the foregoing; for example, a good trading point is one located on a navigable river.

In drawing generalizations, either those that are stimulated by personal needs in everyday living or those that are stimulated by the setting up of problems in the school, the process is essentially one of analysis, that is, of comparison of elements, of seeing relationships among them. But at bottom this process is really that of discovering likenesses, similarities in a number of situations. It requires summing up in a single statement characteristics, traits, features which are alike or unlike. It is, of course, a device of mental economy and increased efficiency.

Attitude and Understanding

But understanding is even more than clear mastery of meaning, concept, and generalization. It is more than the intellectual grasp of problems and issues. There must be an emotional matrix for understanding. This, the psychologist is coming to believe, is supplied by the complex reaction called attitude. As we have said in earlier discussions, attitude is the general mentalmotor set of the organism. Every situation is approached in the physical framework of a given attitude, and this must be appropriate to the other phases of the individual's reaction or the meaning will not be clear.

These attitudes are emotionally colored; witness some characteristic themes:

An attitude of sympathetic understanding The scientific attitude The attitude of meaningful orientation An attitude of confidence An attitude of affection Attitudes of respect, liking, approbation, disapproval, friendship, contempt

Of course, as we said earlier in this chapter, meaning, concept, generalization, and attitude are merely names for the constituents of general understanding. These are not neatly set off one from another. They are fused, thoroughly integrated into the total reaction of the individual.

What, Then, Does Consent Mean?

This must conclude our brief exploration of this crucial problem of our democratic culture—the constituents of human understanding. Brief though it has been, it has revealed some basic problems and has laid the foundation for a new program of education of understanding.

For an individual really to consent to a course of action means much more than blind acquiescence in the plan. It means that he has considered the proposed line of action, that he has thought through it (together with other possible courses), and that he agrees that the facts justify its adoption. This is, indeed, the basis of "representative" action in a democracy. Theoretically, in choosing a representative to act for him, the citizen does not relinquish his power over final decision. The assumption is that he has the organized information and the intelligence for a review of the problem to enable him to decide what he would do and to compare his proposed course of action with that of his "representative." Actually in our complex modern world he resorts to the method of letting a representative act for him, because he himself has not time, interest, professional background, and facilities to do what is necessary. To assemble and digest the necessary information and to debate possible courses of action are technical tasks requiring access to a wide range of data, special equipment, and leisure time. Nevertheless the effectiveness of the democratic method in the long run depends on the extent to which the citizen really understands problems and their alternative solutions.



Part III

NEXT STEPS TOWARD SCHOOLS OF LIVING

CHAPTER XIX ·

THE NEW EDUCATIONAL PROGRAM: ACTIVITIES, SUBJECTS, AND SUBJECT MATTER

On this eclectic psychology we can build a new program of education with some assurance that it will advance the world's experiments in government by consent of the governed. With it we can make good tentative answers to the questions we have asked concerning the best form of activities, the general character of the materials of education, the departmentalization of the school, the organization of the work around problems, and the like.

We know now the desiderata of our new curriculum if it is to produce a large minority of informed, thinking citizens. It must

- Provide every person with an opportunity to use all his powers of assimilation; that is, it will consist of many-sided activities and varied materials.
- Organize these on the principle of integration, assembling together in close relationship all the meanings needed for understanding.
- 3. Provide for verbatim repetition of all socially worth-while skills.
- 4. Give constant practice in confronting the important problems and issues of modern life.
- Practice youth everlastingly in scientific thinking so as to break down the universal and chronic tendencies toward wishful and empirical thinking.
- Recognize and give play to the child's purposes and motives;
 build on the child's intention to learn rather than on the teacher's intention to teach.

- 7. Recognize the competitive self-defensive drives of most people and build a program of social co-operation through self-governing school communities.
- 8. Provide frequent opportunity for creative expression and the building of aesthetic awareness.

As we have seen, two groups of workers have contributed the knowledge and the techniques needed to do these things, the scientific workers of educational sociology and the educational experimentalists of the laboratory schools. Whereas the former have given us much of the content of the new program, a method of social analysis, and examples of new materials, the latter have produced new programs of work, new syntheses of knowledge, new integrations of science and art needed in studying man and his changing society, experiments in teaching methods, and the like.

Doubt Cast on the Existing Subject-curriculum

If the schoolmasters of the First Industrial Revolution had possessed a psychology of consent upon which to build a great education of understanding, they could not possibly have organized the curriculum in the form of a score of narrow, idea-tight, mental compartments, and conceived of learning as the giving back to the teacher of words memorized from textbooks. As our historical survey in Chapters VII–XV has shown, the curriculum has become a mosaic of narrow academic subjects, the content of which is unrelated to our crucial current needs. Certainly the present curriculum in geography, history, civics, economics, business English, and the like does not present the honest, intelligent, and intelligible description of man and his changing society which is required by our youth if democracy is to survive.

The content of these "subjects" has been assembled by research scholars in academic compartments of knowledge and presented to young people in encyclopedic textbooks. For example, meanings dealing with man and his physical environment have been presented in a "subject" called "Geography" which is assigned to "periods" of about thirty minutes a day. Certain

phases of the story of government have been set up in a subject called "History"; this has been divided further into American History, Ancient History, Medieval and Modern History, and the like. Certain other meanings dealing with industry, trade, finance, property, and the like are assembled in another subject called "Economics"; still others describing the structures of governments are given in "Civics." Thus the subject matter of human cultures has been cleverly cut up into many mature logical classifications. This was probably inevitable because, as we have seen, our textbook curriculums were made originally from scholarly researches on the assumption that units of study in the school should be presented to youth in blocks similar in content and organization to the fields of research.

But the ingenuity of the research scholars went to far greater lengths than merely to create "subjects." Within these categories they also parceled out the subjects themselves in a scheme of grading based on unfounded conceptions of growth. For example, they offered the "geography" of Europe in the fifth grade and that of South America in the seventh because, as they said publicly, "Europe is composed of only one civilization, while South America comprises three!" Similarly the facts of the "first half" of the history of the United States were allocated to thirty-minute or forty-minute periods in the seventh grade, the "second half" to corresponding periods in the eighth, and the structure of American government (community, state, and national) to several fortyfive-minute periods in the ninth. In the tenth grade, teachers of medieval history were given two hundred and twenty-five minutes a week; and finally, to guarantee skill in delivering the right words in college-entrance examinations, the twelfth-year program took youths over a review of American history.

Thus studies of these curriculums of the specialists show that each "subject" dealt with but one narrow sector of human culture. Consequently interpretations of civilization were bereft of meaning by the boundaries between the "subjects." Nothing short of genius on the part of a student could create an ordered understanding of modern life from such a compartmentalized arrangement of materials.

The New Curriculum Built on Understanding Units

The starting point of curriculum organization for the study of society will not be the learning of the facts in "subjects" called "geography," "economics," and "civics"; it will be, rather, a realistic problem of individual and social life with which young people will grapple directly. One question and one only should guide our search for a sound curriculum organization: What meanings and attitudes must be developed as integrated units to enable juvenile minds (or adult minds, for that matter!) to understand modes of living and social problems? The chief criterion of design must be human understanding, not conformity to conventional categories. So the new program of the social sciences is being organized into "units of work" instead of into the conventional "subjects." And so a new synthesis of knowledge is being created in the new curriculum.

How, for example, can a young person understand any part of that spectacular conquest of the North American continent which is called in school histories "the westward movement" without assembling into close and natural interrelationships the facts, principles, trends, forces, and dramatic episodes that are now split up into a dozen narrow subjects and scattered through the school program from the primary grades to the university? He should be given, instead, one unified experience involving

the frenzied trek across the Appalachians . . . the furious competition among Eastern cities for Western trade . . . the geography and topography of trails, roads, natural resources . . . the history of transportation from trail and flatboat to canal, railway (*Tom Thumb* to national standardized systems), and steamboat . . . the economic history and inventions, machines, artificial power . . . the exploitation of coal, iron, oil, and the land . . . the social and cultural forces — the restless, dynamic spirit of the half-gypsy nomads, the rise of a plutocracy, and the lack of domestic architecture and art . . . in short, the whole complex, integrated development of American life.

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If further illustration of this principle is needed, note the vast range of data that must be assembled in juxtaposition in order to produce understanding of the complicated life of a community:

"Geographic" data: facts of location, climate, topography, natural resources.

"Economic" data: status of manufacturing, trade, agriculture, trans-

portation, communication, banking, finance, credit.

"Political" data: the legal basis of government, the control of local government by economic interests, the role of political parties and "machines," interest or indifference of the public, efficiency and honesty of officials, financing of government, and the like.

"Social-psychological" data: formation and control of the public mind; the role of the agencies of communication; the characteristic climate of opinion in families, neighborhoods, and social organizations; basic interests and standards of the people; status of religion, education, social organizations, and the like.

"Historical" events and movements: economic and political happenings and trends, population changes, social-psychological develop-

ments.

"Aesthetic" data: the creative expression of the people at various stages of community development, as revealed through community planning, architecture, folk song and dance, literature, graphic and plastic arts, and the like.

We need not expand the details farther. The examples we have given could be duplicated endlessly, but each addition would merely clinch our principle of organization — namely, that curriculums must consist of such well-integrated units that each one will assemble a wealth of related meanings. Indeed, the subject-matter specialists are themselves beginning to see this. Some of the school subjects, while still retaining their old subject names, are in fact new integrated units of study. It is conceivable that "subjects" might change in this way to such a degree and in such a manner as to constitute a true description of society. If they do, it will be because the specialists who teach them have ceased to be interested in them mainly as separate subjects and have become masters of psychology and therefore true educators.

No One Predestined Curriculum Arrangement

Having made clear this desideratum of curriculum organization to guarantee clarity of understanding, we must hasten to utter an important caution. This is that there is no royal road to social understanding. There are many lines of study and growth by which an effective comprehension of our complicated society can be achieved. There are many different starting points, many different sequences and orders of development, many different arrangements of excursion, discussion, reading, units of episode, statistical fact, historical trend, and data of social problems. From the naïve firsthand community study in the primary grades to the critical economic analysis of the programs of the N. R. A., Fascism, Communism, and Socialism in the senior high school and college, there are perhaps a score of arrangements of topics and units-of-study, any one of which may be as effective for maximum growth and understanding as any other.¹

Having uttered this caution, I hasten to reiterate the fundamental principle of *relationship* of educational materials. In every unit-of-work the curriculum-maker must give the student access to all of the meanings and generalizations necessary to the building of corresponding appropriate attitudes for clear understanding. We can turn now to the positive contributions of a generation of experimentation with new programs of study.

Broad New Units-of-Study Mark the Educational Transition

First and foremost the new schools are going through a transition in arrangement as well as in content. Not only are they courageously beginning to confront young people with the reali-

¹ This caution is made to warn the reader against the incorrect inference that the present writer, in presenting to schools a systematic scheme of instructional materials, — in some thirty-odd textbooks, workbooks, and guides, — assumes in doing so that it is the only or even the best possible graded organization of material. That it is an effective one has been proved by some years of practical school use.

ties of our contemporary culture, but they are experimenting with varieties of organization of program. No one of these laboratory schools would claim today the ultimate success to which it aspires, but there can be no doubt that these new courses give promise of building real understanding.

Because of their enormous variety it is not easy to characterize them briefly. Their essence is, I think, that the curriculum is presented as a series of broad units-of-study, the content of which is taken directly from the real social situations around the young people. In some schools they are called "units-of-work" or "projects" (or even "centers of interest"), and all conventional subject names are omitted from the course of study. In others new subject names are used — for example, the "social studies" or the "social sciences" in place of history, geography, and civics, or "general science" in place of physics, chemistry, zoology, botany, astronomy, and geology.

What they are called is, to a certain extent, of little import. It is their content and organization that really matter. And we cannot emphasize too strongly the point that the new units-of-study differ from the old ones in two respects: (1) they start from the social and personal needs and experience of the students; (2) they ramify ruthlessly across any conventional subject boundaries in so far as this is necessary to make available all meanings essential for understanding and all situations necessary to the vital, wholehearted expression of the student.

These new units-of-study vary in length from a few days or a week or two to several months. There are some new schools that organize their programs in half-year or year units-of-study; but where that is done, a whole series of subunits are developed around a central semester or year theme. Furthermore, the units-of-study in the kindergarten and primary grades tend to be many in number and very short in time.

The scope of the new units-of-study, then, is determined by a combination of the teachers' judgment as to the meanings and generalizations that must be on tap for clear understanding and the range of the students' capabilities and interests. The latter are seized upon as a rough initial guide to launch the study.

But, in addition, the teacher, as a student of society, consciously designs activities and materials which will go infinitely beyond the range of initial student interest.

Characteristics of the New Program

Examples of outlines and timetables of the new units-of-study are given in current books. These being accepted as representative, what, then, are the outstanding characteristics of the new programs? In answering this question we will effectively contrast the new programs with the old ones.

FIRST, LONGER AND MORE FLEXIBLE TIME PROGRAMS MAKE BROAD INTREGATION OF LEARNING POSSIBLE

The old program was cut up into a great variety of short periods which were eight, fifteen, twenty, or thirty minutes long, and were marked off by the ringing of bells and the starting and stopping of various kinds of work. In the new program the day is also divided, but not into so many parts. Many periods are long,—an hour to an hour and a half,—thus providing a more flexible program in which students and teachers can plan and carry out varied activities together. This flexibility and variety of activities conduces to integration of meaning, and hence to the building of understanding, which we have accepted as the great intellectual goal of education.

Second, Many Kinds of Activities Are Integrated to Form Units-of-Study

The new program is based directly on our two major psychological principles: active and integrated response. Hence learning is not conceived of as a mere giving back to teachers of words that have been memorized. In place of verbal "lessons" studied and recited in brief class-periods, the program consists of a variety of activities which exercise all the powers of the children.

For example, the little children reconstruct community life with blocks and other materials, go on excursions and trips, and

make firsthand studies of stores, markets, docks, industries, public buildings, parks, and playgrounds. They write, talk, paint, draw, read, dance, and sing. In the new social sciences of the higher grades, instead of taking "the next ten pages for tomorrow," the young people, individually and in groups, do many kinds of things. They maintain bulletin boards, hold informal debates and open forums, discuss and interpret the results of diagnostic tests, give plays related to the study of current movements, go on excursions to local industries and places of historical interest and importance in community life, visit exhibits and collections, libraries, museums, what not. Also, as individuals they find important facts by means of various kinds of research, and report on current events. They interpret cartoons and construct original ones; they make graphs, maps, and time-lines. They look up related materials in reference books, keep scrapbooks, write stories and essays, and do a host of other things. Putting the situation more succinctly, the new schools utilize no less than six kinds of activities:

- 1. Orienting Activities. Trips to markets and stores, factories and farms, museums and libraries, warehouses and banks, railroads and steamship docks, city-council and government offices, galleries and artists' studios. Trips to the surrounding country-side or to the nearest metropolitan center. Excursions for the purpose of dramatic orientation to the world about. Here there is a new educational concept: Free the legs of the child as a first step toward freeing his mind.
- 2. Building Activities. Reproducing in miniature the striking characteristics of community and national life: in the primary grades, stores and homes, post offices and other public buildings; in the junior high school, water-supply and power plants to name but a few. Building for the sake of dramatizing meaning; building for understanding, even more than for technical skill. Free the arms and hands of a child and you will help to free his mind and spirit.
- 3. Practice Activities. The repetition of acts in which specific techniques are needed: mental skills, such as those of arithmetic, spelling, and scientific manipulation; manual skills, such as

those of typewriting and handwriting; craft techniques — the use of tools and machines; and the social skills involved in organizing people. Thus the new school does not hold drill in contempt. On the contrary, it employs it intelligently to build socially necessary techniques.

- 4. Expressive and Appreciative Activities. The mass-school limits its expressive work to things that can be done with a few materials, lead pencil, pen, paper, possibly paintbrush and crayon, means of expression that can be carried on in one room and chiefly at a desk. But the new schools engage the child in a great wealth of creative activities sculpture, music, dance, scientific research, painting, creative writing, dramatics. And these are regarded as the indispensable route to the building of appreciative persons.
- 5. Research Activities. The new schools utilize all the ways there are of finding out things: studying the past through the experiences of old residents as well as by documentation from old records, by gathering information in local industrial technology and agriculture and compiled archaeology, by reading from books of drama, travel, romance, biography.
- 6. Forum Activities: the Interpenetration of Minds. Finally the new school sets up clearinghouses to which each person brings his own research findings conference tables at which young people and their elders exchange and validate ideas, learn the art of co-operation, and grow under the stimulating impact of personalities upon one another. Thus another new concept has been added by the new education: Free the larnyx of the child if you would free his mind.

A Caution: the Conventional Program
Also Is an Activity Program,
but of a Very Limited Kind

To say that the new program is an activity program is not to imply that the old one is not. Reading from books, listening to directions, writing, and "reciting" are actually forms of activity, but of what limited kinds! The old program is the result of several still popular misconceptions of education and of the role of the school in the educative process. The most glaring of these is that a school is the place in which one prepares for the serious work of life. This preparation is regarded as something distinct from one's present life. It is to be accomplished by a mechanical "learning" of "subjects" in "periods," and the life of the school is therefore abstracted from the real, actual life of the pupil. The inevitable result of this viewpoint is to prepare and "discipline" the individual for hypothetical situations which he may meet in his future life. This misconception of school life ignores the task of developing the individual as an integral present part of the community.

Another misconception is that education is something that is done with symbols. This view results in the school's being dedicated solely to the mastery of words, mathematical signs, rules, and the like. Closely related to this misconception is another, that of regarding education as the sum total of the knowledge that an individual "learns" in the schoolhouse. Mastery of so much arithmetic, grammar, spelling, geography, history, writing, reading, and the like is the aim. Subject matter has been taught to boys and girls, not because of its service to them as boys and girls, but because of the benefits that the curriculum-makers believe may accrue to them later on in life.

This, then, is the old program, made up of verbal activities only and those of a dead, informal, analytical kind. The youth could have little active life in such an atmosphere. His real life began with the dismissal of classes and ended with their resumption. The inevitable result was and is that school life is not made a living part of the individual's experience.

But, we repeat, even in this stultifying atmosphere a certain amount of activity did take place.

THIRD, USE OF THE ENTIRE SCHOOL PLANT AND OF THE SURROUNDING COMMUNITY

If we should trail one of the new-school groups for a week or two and record what they did, we should find that the students spend much of their time out of their assigned classrooms — for example, in the library, shops, laboratories, studios, auditorium, and offices of the school itself. The scenes of their activity, however, are not only the entire reaches of the new-school plant but also the whole community and the region round about — the government offices, stores, markets, industries, the water supply, the docks, and the like. Pupils survey the layout of the town, collect pictures and old records, and interview old residents, city officials, social-welfare secretaries, and a host of others.

FOURTH, A NEW ORGANIZATION OF IDEAS AND OTHER "LEARNINGS"

Trailing the "new-school" group and recording what it did would also reveal a whole new organization of "learnings." Instead of learnings neatly acquired within the categories of the traditional school subjects — reading, arithmetic, algebra, physics, geography, and the like — we should find all or many of these kinds of learning going on and organized in new relationships in any one hour of study. For example, the study of the water supply of a community in, let us say, the ninth grade would involve such a variety and mixture of learnings as

- r. Appointment of committees to visit the city engineer's office and other municipal offices, and to collect, study, and report on maps and bulletins.
- 2. The assembling of library materials dealing with various phases of the problem.
- 3. The preparing of maps, graphs, and other pictorial representations of various phases of the system.
- 4. The study of and report on methods of purifying water.
- 5. The making of a working-model of the purification plant.
- The study of and report on principles of hydraulic and other scientific problems involved in pumping and distribution systems.
- 7. The writing of historical accounts of the development of the system and its relation to other trends of growth in the community.

Now if the multitude of specific learnings that went on in such a unit of study (lasting perhaps a month, an hour or more

a day) were classified into the conventional high-school subjects, we should find most of the latter in the list, for example:

- 1. Mechanical drawing blueprinting, designing, and the like.
- 2. Mathematics arithmetic, geometry, algebra.
- 3. Reading, writing; English composition, oral speech, discussion.
- 4. Industrial arts, manual training, handicrafts.
- 5. Community civics, local history, geography.
- 6. Physics, chemistry, bacteriology.

Thus in the new school there is a vast amount of what is conventionally called "subject matter." Meanings are acquired, but in a totally new organization. The organizing center is the need of the young people to understand how water is supplied to the people of their community. The meanings and principles are learned in the relationships needed for understanding community life, not necessarily in the relationships needed for remembering them as the facts of ten or more school subjects.

One important caution should be stated, however. Such a unit could be, and is today in some high schools, organized as a unit-of-study within a school subject called "general science," or "science," or even "physics and chemistry." Or it could be, and is today in some schools, organized as a unit-of-study in a broad department called "social science." But, irrespective of the name of the department or subject within which it appears, the content, the *subject matter*, includes meanings, generalization, attitudes, and other processes that are conventionally classified and learned in very different subjects of study. Hence the new organization around the pupils' need to understand produces a curriculum of very new and different "subjects," no matter what we call them.

FIFTH, A NEW CONCEPTION OF "SUBJECT MATTER"

This brings us to the perennial controversy over "subject matter." The college professors of the academic subjects (especially the normal-school and teachers'-college professors) denounce these new courses on the ground that they have "a lot of activity" but lack "subject matter." Certain protag-

onists of project methods or progressive education, on the other side, have implied and have even definitely stated that "subject matter" has no place in the new school. Kilpatrick and other leaders condemn the conventional course of study as "a subject-matter approach" to knowledge. Learning is criticized as "giving back on demand subject matter set out in advance to be learned." Following Dewey these leaders set "experience" or "the reconstruction of experience" over against "subject matter" as the content of education. In attempting to distinguish between "subject matter" and "experience," these moderns have really had in mind the difference between narrow and wide ranges of experience or, put differently, between a limited and a vast number of activities and kinds of activities.

As we have just finished saving, the old-school program as well as the new one was made up of "activities," but the activities of the old program were few and far between and stilted and dull in character. They were restricted to the four walls of a schoolhouse, to a few hours a day, and to a few months in the year; restricted to the reading of a few books and to the most mechanical of physical activities; restricted to exceedingly little appreciation and almost no creative expression; restricted in their degree of social participation, almost no opportunity being given for organizing and leading group activities. In short, "subject matter" throughout the first century of American mass education was limited to the mastering of a few facts and skills which were related to but a few narrow aspects of the total world. It is little wonder, therefore, that the epoch-marking work of Parker, Dewey, and their followers resulted in nationwide attacks upon what was regarded as "subject matter." Hence the confusion of terms and concepts and the valiant knocking down of straw men by both sides of the controversy.

The Issue Is Not Subject Matter versus No Subject Matter

For the object of attack on both sides—that is, "subject matter"—is a straw man. The controversy is not clearly focused. The issue is not "subject matter" versus "no subject

matter." It is really "how much and what kinds of subject matter and how learned."

Both sides really want subject matter, for the new education, as well as the old, is founded on it. Every element of experience is a type of subject matter. For example, meanings, facts, data, principles, thinking with them, and creative expression and appreciation with any media — all are "subject matter." Obviously people cannot understand without the building of meaning. They cannot think without data with which to think. They cannot express themselves creatively or appreciate sensitively without the media of expression — words, tone, light and shade, the rhythmic movement of the body, gesture, and so on. No human response can be made except with the data of experience. And the data of experience constitute the subject matter of education. Hence it is absurd to set "subject matter" against "experience," "reaction," or similar concepts; for they are in reality synonymous.

Experience, then, means not some mythical or mystical thing, but the ongoing stuff of life itself. It includes the meanings and attitudes with which we respond to people, problems, institutions, and the objective world about us. It is the generalizations with which we behave all day long, from morning to night.

The old-school conservatives insist that subject matter means mastery of definite facts, principles, and skills; the most clear-headed of the new-school progressives agree with them in this, but demand far more of education than that. They maintain that any data of experience are the subject matter of education. Painting, drawing, and sculpturing are subject matter; lecturing to an audience or engaging in open-forum discussion is subject matter; writing or reading a poem, an essay, or a short story is subject matter; dancing, music, rhythms, are forms of subject matter; crafts are subject matter.

The issue, then, is found to be not as between subject matter or no subject matter, but as to the range and variety of kinds of experience to be included in the concept. The old school limits the kinds of experiences which it provides in its subject matter; the new school would embrace the whole possible range of active human life.

SIXTH, MUST THE PROGRAM BE PLANNED IN ADVANCE?

It was one of the besetting sins of the old education that everything that the young people did was on a plan, made, cut and dried, in advance. The "course of study" meticulously specified in advance the books and pages to be read, the words to be spelled, the arithmetical operations to be memorized, month by month, even week by week. Against this standardized procedure many of the new educationists have violently revolted to the other extreme, asserting that the curriculum must be made "on the spot." The teacher, it is asserted, must be alert to seize upon all the educative possibilities in every passing moment, and must build and reshape the activities of the children from hour to hour. Under the sincere and enthusiastic urging of these leaders, many teachers have tried to build their programs without planning in advance. The inevitable result of trying to carry out these precepts with a broad and varied curriculum and thirty to fifty young people has been educational chaos. Not only is there confusion in the administration of classes and groups, but there is mental and emotional confusion as well. There is waste at every point.

The very conditions of modern education work against the plan of making the curriculum largely on the spot. To name a few obvious ones:

- r. An overwhelmingly complex social world, the meaning of which must be reduced to order, and educative examples of which must be arranged in some kind of development.
- 2. The vast number of optional types of topics and problems for study, of sequences of attack, with the consequent need of careful evaluation to determine relative educational values.
- 3. Enormous schools with large classes taught by single teachers.
- 4. Wide individual differences in abilities, aptitudes, and interests among the students.
- Scattered and not easily assembled materials for study, investigation, and report.
- The necessity of using specially trained and experienced teachers on particular phases of the work, especially in the junior-senior high schools.

There are also theoretical imperatives that must be dealt with. As we have seen, "to educate" means to guide living, to guide growth. The goal of education is maximal growth, and the task of the educational worker is to provide an environment most favorable for growth. Without such an educational worker at hand to guide development, growth will be haphazard, subject to the vicissitudes of casual events: only by chance alone will it be the maximum. Even superficial study will convince one that it must be left neither to the vagaries of youthful whims nor to the circumstances of chance. Certainly some phases of it must be designed, planned carefully in advance. Educational workers must have a prevision of the kind of person they are trying to produce and a knowledge of the best kinds of educational activities and materials with which to develop him. The fullest life for an individual today will be guaranteed by the program-maker only through activities planned in the light of the probable fullest life tomorrow. I repeat briefly the evidence and arguments for this position from a statement of my own in another source:

Visualize various curves as representing possible lines of growth of a trait or group of traits of a single child. Let one such line portray the curve of probable maximum growth; let the other lines stand for less effective rates and amounts of growth. Thus the line of maximum growth will postulate a curriculum of maximum effectiveness in developing the cultured person. Life in each stage of such an education must have constituted a succession of experiences of maximum living now; each must have developed to the limit the potential capacities of the individual. Such an individual will leave school as fully developed a person and contributing member of society as the school can provide. The other lines of growth presuppose a succession of experiences in which the maximum potential of the child has not been developed. In any of these cases he would leave school comparatively inefficient in skills, lacking in understanding and tolerance, and undeveloped as a creative person.

Under what conditions, then, can the educational program produce the fullest growth? Maximum growth is possible only when the program consists of a succession of planned experiences, each of which grows most effectively out of those preceding and leads most completely to those predicted as succeeding. It is the prediction of maximal experiences tomorrow that enables the program-maker to arrange for experiences today of the greatest growth possibilities. If left to the casual circumstances of daily events and to the whim of child interest, this curve of maximum growth would be achieved only by chance alone.

Hence the imperative necessity of the most intelligent design that the curriculum-maker can evolve. At the same time he must constantly visualize alternative future experiences for the child. To aid him in his task the program-maker has two kinds of facts: first, the measured outcomes of earlier experiences of the children; second, the experimental outcomes obtained from activities utilized in schools in the higher years of the program. These data help him to know the content of the children's equipment today. From past experiments with alternative programs he can also predict what will probably be their experiences tomorrow if he builds up certain activities today. In planning activities for a current school year, therefore, the programmaker designs them in the light of the best experimental knowledge of the growth of children in later years. In short, maximum growth can be guaranteed only by predicting the answer to the question: growth toward what?

With this plan the program-maker sees the education of the child as continuous development. Each month and year of school experience is a stage in steady growth. Correspondingly, units of work for any month or year are to be regarded as stages in a continuously developing plan, a plan made by the wise educator and not by the ignorant and immature child. Thus "to educate" can be defined as intelligent direction toward a predicted, desirable goal.¹

This position with respect to planning the program in advance was also held by the important curriculum committee of the National Society for the Study of Education. In their statement they said:

It is necessary that a teacher have at hand at any stage of his teaching an outline of the general attitudes, the finer appreciations, the important concepts and meanings, and the generalizations which he wishes to secure as part of the outcomes of his instruction. Not only

¹ Harold Rugg, Culture and Education in America, pp. 299-301. Harcourt, Brace and Company, New York, 1931.

must he have this outline of attitudes, appreciations, meanings, etc., which he sets as the goals of instruction, but, to be reasonably sure that these come out of the instruction, the activities of children (including all the kinds of work we do in the school) should be planned in outline form in advance.

Another way of stating the matter is that that part of the curriculum should be planned in advance which includes (1) a statement of objectives, (2) a sequence of experiences shown by analysis to be reasonably uniform in value in achieving the objectives, (3) subject matter found to be reasonably uniform as the best means of engaging in the experiences, and (4) statements of immediate outcomes of achievements to be derived from the experiences. That part of the curriculum from which selection of supplementary experiences and materials is to be used as conditions locally suggest, should be planned partly in advance and should be made partly as new materials become available. That part of the curriculum which represents the daily life-situations and interests from which the immediate specific needs of students arise, should be — can only be — made from day to day.¹

Here, then, is a definitive and authoritative answer to our question What shall be planned in advance?

An Example: the Planned Recurrence of Concepts

One of the most frequent criticisms of new educational programs such as that put forward here is that they are too mature for young minds. Surely such concepts as "the interdependence of industrial life," "laissez faire," "a civilization of poverty and plenty," "economic nationalism," and "technological unemployment" are over the heads of adolescent youth! Of course they are if they are to be understood merely from the reading and possible memorization of a few encyclopedic paragraphs.

But experiments in curriculum organization have given powerful cues to the teaching of such abstract ideas. One is that concepts should have designed recurrences in varied settings. An in-

¹ The Twenty-sixth Yearbook of the National Society for the Study of Education, Part II, pp. 19-20. Public School Publishing Company, Bloomington, Illinois, 1926.

dividual's understanding of the world in which he lives grows bit by bit and day by day, as he adds to his experience. Hence the new education conceives of learning in school, like the onward movement of life itself, as an inductive, cumulative process. As we encounter new situations, new personalities, or new problems, we grope our way haltingly and tentatively toward more complete understandings of them. Each new experience modifies our previous attitudes, elaborates or reconstructs our concepts, and creates new shades of meaning. Steadily the streams of experiences which make up both education and life shape and reshape understanding.

Beginning with the earliest years of the primary school, the curriculum, therefore, not only will dramatize its teachings, but will do so cumulatively, inductively, on a planned outline of great theme-concepts. Thrilling excursions to farms, factories, and markets, to docks and power plants, to museums and community buildings, will extend the observations of little children. Such excursions planned about some theme and tending toward some conclusion will bring about the beginnings of generalization. Steadily, as the months and years of the intermediate and junior-high-school grades pass, the activities and materials of the school program should continue to build a constantly maturing understanding of definite themes and ideas.

The curriculum-maker, therefore, selects those activities which give promise of illustrating and enriching the underlying and fundamental concepts of social life. Thus the case is established for a designed curriculum the heart of which is richly illustrated basic concepts in planned recurrence.

CHAPTER XX · NEXT STEPS TOWARD SCHOOLS OF LIVING

WITH THE foregoing outline of the movements which precipitated the concepts of the new education we can turn now to a more detailed analysis of our educational needs today. From history we turn to the problem of contemporary designs and blueprints.

There will be no quibbling about the ideal design upon which we would rebuild our national education if we could. It would be one which would use the natural currents of daily life's activities. From every social agency in community and national life would be drawn its utmost educative function. The family, the neighborhood and community social groups, the press, the church, the government, the enterprises of art creation and appreciation, the occupational activities — all would be turned to the processes of education. And the family and the occupational groups perhaps would be the very spearhead. Such an education would at least be natural — naïvely natural — and real.

The Realistic Education of Premachine Daily Life

The daily life of premachine days gave youth a truly realistic education. Consider, for example, the life of the young person in the normal family of those days — either on any American frontier, in the manor life of medieval Europe, or in other simple societies. Young people from the time they could walk and talk entered into all the activities of the family and into such other "community" life as there was. Practically the only education that was given was supplied in the daily activities of the farm and the cottage, the village and the town. There was no separate

"school" to which one went five hours a day, one hundred and eighty days a year, from the age of six to that of fourteen.

The life of the self-sufficient agrarian family centered about work, and all individuals, children and youth as well as grown-ups, took part in proportion to their age, abilities, and experience. In the raising of food — planting seeds, cultivating, harvesting — the boys worked with their elders in the fields. In the preparing of the food the girls were self-sustaining producers as well as learning "apprentices." In each case learning went on to the extent that the drives of necessity and the intelligence and energy of fathers and mothers permitted. Special skills were the product of this natural and direct education — spinning, weaving, and carding, candlemaking, dyeing, sewing and garmentmaking, shooting with rifle and shotgun, lumbering with ax and saw, carpentering with hammer and drawshave. The simpler chores of the household — feeding the cattle, cutting and piling the wood — were the special assignment of the younger members.

This shows the "apprenticeship" method of earlier times at work. Such education as was achieved was natural and realistic because it was coterminous with life activities that were indispensable. Also, in addition to the work life, there was play, and it too was spontaneous and vital. Again, it was educative within certain obvious limits.

Finally there were, of course, certain formal "educational" activities. There were those exercised by the church, which led to the interpretation of theology and the evaluation of conduct, and even to the literary skill of reading. There were also the rites and ceremonies of festivals and holidays. And last but not least there was in the more intelligent and socially sensitive households the actual passing on of the mores by word of mouth from elders to youth.

Merits and Deficiencies of the Natural Education of Premachine Culture

Now this simple agrarian-handicraft family life had excellences and defects as a means of education. Its chief merit was that it was direct and natural. It was motivated by life itself. In no way was it artificial—"learning about" something, acquiring skills or storing up facts that might possibly be used in the future. One learned while doing a socially necessary and useful thing. The social situation put such a premium on learning that the young person naïvely intended to learn, and the intention to learn is the basic drive of all learning. So the apprenticeship method was natural and direct, and social and individual needs supplied the driving motive force.

But this simple realistic education had its defects as well as its merits. Its chief defect was that it lacked "teachers." Education is not merely "living"; on the contrary, it is guided living guided living that eventuates in growth. It was in the lack of good guides that the apprenticeship method failed so frequently to attain its potential. For the father, the mother, the "master" to whom the craft-apprentice had been "bound out," and the other grownups did not regard themselves primarily as "educational workers." They were family "providers," making economic ends meet and trying to get along with their neighbors. They were too harassed by the threat of danger and too fatigued by the physical tasks of keeping life together to have the energy for education. Moreover, they lacked the attitude and the knowledge necessary to educate. Thus, although most of the natural conditions were favorable for effective learning, the pedagogical and psychological conditions were in many respects very unfavorable. Living for most youth was not "guided," and the potentialities of full realistic education were not realized.

Then in the eighteenth century, as we have seen, came the beginnings of the movement to "educate" all the children of all the people. And with it, we learned, were born the concepts that have so badly stunted the education of youth for a century and a half: (1) education was something that went on in a school-house, separated from family and community life; (2) education was something you did with words and other intellectual symbols and skills; (3) education was something you did before you "entered life." Behind these ideas was a direct denial of the values of the realistic education through real life activities which the agrarian family and community gave its youth. The adoption of these three ideas and the erection of national systems of education upon them fastened upon the Western world a lopsided scheme of education.

From this brief review we at least see more clearly the essential problem of the new education: real schools of living must take the place of the schools of literacy which were created during the First Industrial Revolution. We are confronted by the difficult tasks of using the natural activities of family and community life as the means of education, and of combining with them planned educational direction.

Obstacles in the Way of the Early Establishment of Real Schools of Living

That is clearly the problem before us. But there are serious, seemingly insurmountable difficulties in the way. There is first the fact that family, neighborhood, and community conditions themselves have changed sharply for much more than half our population. The chief factors are quickly recalled to mind:

r. The swift advance of interchangeable manufacturing, the specialization of labor, the automatization of industry, and the disappearance of handicraft and the craftsmanship spirit.

2. The removal of much of the physical work from the home by the mass production of food, clothing, and shelter, the introduction of electric power and laborsaving devices, the general rise in the standard of living, and the like.

3. The entrance of women into industrial, business, and social life; their absorption in a multitude of social activities and their prolonged absence from the home.

A NEXT-STEP JUNIOR-SENIOR-HIGH-SCHOOL PROGRAM

I. The Life of the School as a Whole: the Heart of the Curriculum

committees, the newspaper and magazine, the court, athletic, literary, dramatic, and scientific organizations, etc. The co-operative participation of students in the group activities of the school develops social techniques — for example, organizing people, taking part in open-forum discussion, planning excursions, and the like. These are not extracurricular; Practicing competitive individuals in social co-operation through the school assembly and council, class councils and they are the crux of the curriculum.

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- 4. The multiplication of the professional and civic duties of men and their increasing absence from the home.
- 5. The consequent general decline of the family and the neighborhood as a social center.
- 6. The failure or refusal of political officials and private industrial and business leaders to recognize and fulfill their educational functions; their tendency to avoid co-operation with teachers in planning and carrying on study trips, in collecting current materials, and the like.
- 7. The rapid growth of vast cities and the consequent increasing bewilderment and indifference of citizens to collective problems.
- 8. The utter inability of vast numbers of our youth to find any "gainful occupation."
- 9. The tradition that going to school is "being educated," which still grips tightly the minds of most citizens and educational workers.
- ro. The inability of most parents to see that they are in the most strategic educational relation with their children, and their ignorance of psychology and its applications.

I have named ten factors — many of them closely related, of course — which help to explain the present separation of "school" from "life" and stand in the way of turning community life into real schools of living. There are others, but these are perhaps the focal ones and illustrate the point that I am making. They also serve to remind us again of the transitional nature of our particular generation, for undoubtedly in our generation "schools of living" will increasingly supplant the current schools of literacy.

Practical Educational Conditions That We Must Postulate

Granted, therefore, that reconstruction both of theory and of practice is under way, the practical question remains to confront us: What is the best makeshift program of education to which we can resort? In answering it let us remind ourselves that the obstacles which we have just outlined will undoubtedly continue to confront us throughout this transition generation. I mean the conditions that inhere in the growth of large cities, in the changes

in family and neighborhood life, in increasing unemployment in the mechanized industries and the gradual disappearance of craftsmanship, in the educational apathy and ignorance of the general population, and in the survival of the conventional attitude of citizens and educational workers that schooling in literacy is real education.

Translated into scholastic terms these conditions mean that we shall have to educate the next generation in "schools" built in general structure like those of today, with fairly large classes of young people taught from textbooks and syllabi, going out into their community and the region round about it as "observers" rather than as real participants. We shall, no doubt, have the favorable condition imposed upon us (especially by increasing unemployment) of holding practically all youth through the secondary school and an increasing number of grownups in continuing "adult" education. We may also be able to increase the length of the school day and the school year, and possibly, before the end of our generation, cut down the size of the class imposed upon the "teacher."

Granted these conditions, then, what is our best makeshift program? What is the next really practicable step in curriculum-

construction?

The Next Step: To Apply the Best of Experimental Practices

While we are moving haltingly toward a regime of community-centered education, the cue for our procedure will be found in the combination, or better integration, of the theories, practices, and experimental findings of the two groups of workers who during the last quarter-century have blazed new educational paths. I refer to the so-called "scientific" students of education and to the leaders of those innovating schools variously called "laboratory" or "progressive" or "child-centered." Each group has something of real importance to give to educational reconstruction. The attitudes, methods, and findings of each will make a

definite contribution to the content and organization of the curriculum (educational sociology), as well as to the building of a sound psychology and method (educational psychology).

The scientific workers have contributed at least four things:

- r. The idea of social analysis, experimental attempts to apply it to the mass activities of men, and certain findings in the field of the skills and the content.
- Examples of redepartmentalized programs of study in the skill and content phases of the program.
- 3. Examples of new textbooks based on findings of social analysis.
- 4. Some diagnostic and administrative measuring instruments valid only in the skills.

The laboratory, or progressive, schools offer

- New programs of work based on many-sided activities and utilizing enormously enriched educational materials.
- 2. Many optional new syntheses of knowledge and study.
- New integrations of science and art in studying man and his changing society.
- 4. The findings of twenty years of work by professional creative artists in the schools.
- 5. New experimental courses in the secondary schools and colleges.

These are mere hints at the products of thirty years of educational research that has been carried on by the two groups of innovators. It is clear that each has something of great importance to contribute to reconstruction; neither can be ignored. It is only from the integration of the two that we can build our new science of society in the schools.

Hence our new school shall be both child-centered and society-centered: child-centered because it is the maximum total growth of the individual that we seek; society-centered because growth can be produced only by means of a favorable environment — and in human education that means primarily the culture surrounding the individual. It is principally from the so-called "progressives" — the followers of Parker and Dewey — that we get the theory and practice of the child-centered school. And it is chiefly from

the sociological students that we get the data for the study of man and his changing social order.

Next Steps in Organizing the Program: an Example

These are the chief characteristics of the new departmentalization of the school curriculum. The experiments in reorganization reveal many designs, but one trend is clear — namely, the trend away from the conventional curriculum of a score of subjects in the direction of a few broad departments. To make the general trend stand out more sharply I present one practicable reorganization in chart form on the adjacent pages. The activities and materials of the curriculum are designed for several principal departments of study:

- I. The life of the school as a whole: the work of councils, committees, assemblies, organizations groups of all kinds. In the mass-school these activities (such of them as exist) are generally called "extracurricular." In the new school they constitute the very heart of the curriculum itself.
- 2. Body education: an integration of informal physical play activities with the dance, music, pageantry, and the like. In a very real way these activities should constitute the very base of the whole scheme. This division of the curriculum is discussed in Chapter XXII.
- 3. The study of man and his changing society the new social science. This is the intellectual core of the organized program. It is the "social science" of the new school, plus some materials and activities which are sometimes grouped in English literature and science. The direct firsthand study of community and national life and world affairs is included. As this is one of the two great central strands running throughout the program I will discuss it more fully in Chapter XXIII.
- 4. Introduction to creative and appreciative arts.
- 5. Creative work period.

Taken together, these two (4 and 5) constitute the second great central strand of the new program of work. They develop

parallel to the study of man and his changing society by contributing the appreciative and creative aspects, while the former contribute primarily to the problem of tolerant understanding. Ideally the two should be designed together.

The introduction to creative literature and the fine arts, like the introduction to changing cultures, would aim primarily at an appreciation of the contemporary arts but would make much use of history. Especially would it emphasize the emergence of important creative movements after 1000. It would make use of such strands as (1) American civilization as revealed in its changing architecture; (2) the rise of the American theater; (3) creative writing — poetry, fiction, essay — in each of the principal stages of American world history; (4), (5), (6), (7), similar strands dealing with painting and sculpture, music, the dance, the handicrafts and industrial arts. In the light of study of these historical strands, there would be prolonged consideration of the state of the creative and appreciative "minds" of America and their reconstruction through the reconstruction of education. This program is discussed more fully in Chapter XXIV.

6. There are two minor strands called, respectively, "Introduction to the physical and natural world" and "Introduction to human behavior." Each is less extensive in scope: the first is confined to the junior high school, the second largely to the senior high school. The latter is of very great importance and represents a new integration of material. It might embrace the study of such matters as the following: biological foundations of human behavior; integrative action of the neural-muscular-glandular system; habits and individual and social behavior; defensive mechanisms; topics dealing with nutrition, health, problems of mental hygiene; character formation; individual differences in various traits; language and social development; influence of face-to-face groups and agencies of communication on the formation of personality; the American climates of opinion how formed, controlled and changed; propaganda, censorship; attitudes, opinions, stereotypes; leadership, authority, and the crowd.1

¹ The outline of these six principal strands is reproduced from Harold Rugg's Great Technology (The John Day Company, New York, 1933), pp. 266-268.

It is primarily upon these six strands that we depend for the development of an understanding of our economic and social system, and for the rounded-out growth of the individual. And yet, effective as such an organization will be, we know full well that it is only a good next step toward the ideal, namely, real schools of living.

To the consideration of the work of these departments of the new education we turn in the next and concluding chapters.

CHAPTER XXI · THE LIFE OF THE SCHOOL AS A WHOLE: THE CENTER OF THE CURRICULUM

THE FIRST section of the chart of the suggested curriculum focuses our study of next steps in reconstruction upon activities that from time out of mind have been called "extracurricular." The programs of school assemblies and councils, the work of committees and clubs, teams and bands, publications and organizations have always been thought of as something outside the curriculum. They are "extra," added on. The catalogues of schools of education and teachers colleges include courses in "Organizing Extracurricular Activities." There are yearbooks of national societies under the same title. There are chapters of books on education, indeed whole books devoted to "Supervising Extracurricular Activities." And several thousand schools, especially secondary schools, have added them to their academic curriculum. I say "added them to" advisedly, because as yet most of our schools regard them as addenda to the main business of education, which, they say, is the mastery of the academic subjects of study.

And yet the laboratory schools, public and private, have now come to regard these activities, which I have gathered together in one category, as the very life of the school itself. As such, they maintain that instead of being "extra" to the curriculum these activities are the nub of it. They constitute the most realistic part of it.

Here, then, is a central issue of curriculum-reconstruction. To understand it let us glance back quickly at its history.

Some Early Examples of Adding "Extra" Activities to the Curriculum

- I. Athletics. The American graded school and its verbalsubject curriculum had hardly begun to take shape when the demands of exuberant youth forced the formation of certain nonverbal "activities." As early as 1811 athletic sports were developing in the Eastern "academies." We have records showing that organized football games were played at the Phillips Exeter Academy by that time and that shortly thereafter other Eastern academies followed suit. Baseball made its appearance in American sports in the next two decades; soon after the middle of the century the Worcester (Massachusetts) High School had an organized baseball club. In the fifties Eastern secondary schools were playing interscholastic games, and after the close of the Civil War intercollege and interschool athletics spread with increasing rapidity all over the country. By the turn of the twentieth century every public and private secondary school of any size took part in interschool contests in football, baseball, basketball, and "track," and many had added hockey, tennis. and even golf. Although some attention had been devoted to the development of intramural games, in which practically all pupils took part, even these were not regarded as an indispensable, integral part of the educational program. In most schools they also were "extra" to the curriculum.
- 2. Pupils in School Government. The swift increase in the size of schools soon after 1800 and also the adoption of the Lancaster-Bell Monitorial Plan led to the use of older boys in certain policing activities of school government. As early as 1825 the New York High School, and in 1826 the Girls High School of Boston, used the plan. The monitors took attendance, observed and reported on instances of misconduct, and in some cases administered the punishment. But this too was government imposed by "olders" on "youngers."

Other examples are known of early attempts to develop forms of pupil government. As early as 1832 the Hartford (Connecticut)

Female Seminary used a kind of honor system in which each pupil turned in reports on her own misdeeds. In 1833 the Mount Vernon (New York) High School described its plan for using pupils in the supervision of study halls. There was also some discussion among American schoolmen of English student-government plans which were in operation before the middle of the century.

This is a meager record, indeed, of the concept of growth of the power of government through daily practice in self-government. Yet the record is a fitting measure of the extent to which social co-operation was practiced in American schools — pretty well up to our own day. The concept of building personal and group habits of social control by participation in self-imposed control simply was not grasped and applied in the ninety-and-nine of our schools.

3. Literary Organizations. But the verbal emphasis in education soon showed itself in the establishment of school literary societies. The Phillips Exeter Academy had its Rhetorical Society in 1812 and a secret "literary" fraternity in 1818. Exeter organized the Phillips Debating Club in 1841. In 1857 the Worcester (Massachusetts) High School had one.

The story of the rise of dramatic clubs and forensic organizations is much the same. At rare intervals plays had been given in American schools even before 1800. The young people at Leicester Academy are reported to have put on *The Scolding Wife* as early as 1790. But a half-century passed before the first dramatic organization, Sigma Phi, was established (1859) at the Hartford (Connecticut) High School. At the Central High School of Philadelphia a literary Congress appeared, made up of the representatives of several such debating, dramatic, and forensic organizations.

4. School Publications. The work of the literary societies led to the beginning of student publications. Papers which were written and read by students before the societies were copied by hand and passed around among the students to be read. Little by little this led to the idea of a "school newspaper." Perhaps the earliest of such "hand-press" papers was that of the Public Latin School of Philadelphia. Shortly after 1850 the Girls High School of Port-

land, Maine, had two such publications — The Constellation and The Aspirant. Soon afterward other secondary schools in the East began to issue small printed magazines. There was, for example, the High School Thesaurus of Worcester, Massachusetts (1859–1862); the High School Chanticleer of Hartford, Connecticut; and the Student's Manual of the Boston Latin School (1851). The contents can be illustrated by that of the Thesaurus, which said it was devoted to such things as "translations of the classics, editorials, general and school news, poetry, essays, advertisements, school calendars, class and examination schedules, courses of study."

After 1890 Many "Extras" Were Added Quickly to the Curriculum

As the formative period of American education passed, however, and the administrators plunged into the years (since 1800) of curriculum tinkering and rearrangement, many experiments and additions were made of the extracurricular type. A host of service and "subject" clubs made their appearance. There were all sorts of science and agriculture clubs - farming, dairy, poultry, canning, and others. The camera, the radio, the movies - each had its club. History and civics produced "Know Your City" Clubs, Better Community Clubs, Historical Shrines Clubs, Postage Stamp Clubs, Travel Clubs, and many others. The Booklovers Club, the Scribblers, the Scrapbook, the Poetry, the Short Story Clubs — these are only a few of the hundreds that grew out of "English." The other subjects contributed their allotment; there were Commercial Arts Clubs, Fine Arts Clubs, Home Arts Clubs, Language Clubs, Mathematics Clubs, Health Clubs, what not,

Outside the school altogether, there were Boy Scouts, Girl Scouts, Boy Reserves, Girl Reserves, Hi-Y Clubs, Junior Red Cross, Junior Chamber of Commerce, and a host of others.

Inside and outside the school, after 1890, young America, like its older generation, "organized."

Thus the Fallacy of the Extracurriculum

From our vantage point today we can perceive that two strands of curriculum formation advanced together in the first hundred years of school history. One was composed of the academic subjects, the five hours of study and recitation of reading, writing, arithmetic, history, geography, science, language, and so on. This was regarded as "the curriculum." This was "the life of the school as a whole." It was adult-made, adult-governed, adult-policed, and adult-enjoyed. The life of the school was the life of the grownups that made it and ran it. Its "success" in the eyes of the adult community was a monument to the military genius of the administrative and teaching staff.

The other strand was the cumulating body of these so-called extracurricular activities. In themselves, apart from the subjects of study, these constituted the very life of the juvenile community; they were based upon youth's expressed interests and were given vitality by their being self-propelled. It is these that, even before the day of the theories and experiments of the child-centered schools, began to vitalize the high-school part of the program.

Moreover, in this historic school of the Machine Age little or no use was made of the educative process of group interaction. There literally were no true "groups" in the old school. It is true that youths were placed together in "classes," and the whole school "assembled" at certain times. The class did actually sit in the same room each day from nine to three, directed from up front by the taskmaster and police-officer teacher. If the school was of high-school grade, the young people marched into the auditorium to the time-beat of a pupil playing the piano, to attend "morning exercise," a reading of the Bible, "announcements," and an admonition from the principal, a teacher, a returned alumnus, or a prominent citizen.

But this mass life in the old school was only a make-believe group life. It consisted of a teacher directing thirty to forty separated individuals. Although these individuals sat and listened, and marched in the same rooms and corridors, they did not constitute true groups. Each was isolated from the other. Their total relationship was to the teacher. No two of them had real interaction with each other.

But Were These Schools Real Schools of Living?

The history of a century of tacking late-afternoon and weekend activities on to the academic curriculum reveals that they were not. Even in our own generation schoolmasters continue to call these activities "extracurricular." Except in rare cases of experimental institutions, "School" was not seen as a whole, valid social institution in itself. The home was such a valid institution. It propelled and maintained itself under its own drives, satisfied its own needs, and disciplined itself. The Press did likewise. So did the Church, the Chamber of Commerce, the Rotary Club, the Central Labor Union, and a host of other community enterprises. Each was run by a group of people — young or old — on its own internally generated criteria, for the satisfaction of its own needs and purposes. Each was measured and lived and died in terms of its success in satisfying those purposes.

But the school was not a valid institution of community life. It was neither young people nor old people (and never both!) living together under their own momentum, satisfying their own self-recognized needs and wishes, and governed by their own self-imposed discipline. It was, on the contrary, something that grownups did to and for young people. It was a period of post-ponement of life, of so-called preparation for life. It was, to borrow a figure from the formal arts, Still Life. Certainly it was not a School of Living as we have used the term in this book.

In the New School These Activities Are Accepted as a Dynamic Center of the Curriculum

But come with me into another kind of school and note the manner in which group activities are employed.

Here is a fourth-grade group, conducting its early-morning group discussion. A nine-year-old boy is in the chair; the teacher

sits in the circle as one member of the group. The chairman of the farm excursion committee reports the plans for the trip that is to be taken to the country the next day. The members of the group make notes of the time and place of starting and things to bring. Another committee member distributes a mimeographed copy of the outline of observation and study that the class had jointly made during the preceding days, with the guidance of the teacher. There is a further discussion, some minor changes, and final approval of the outline. Assistant guides are appointed. Other business comes up. The chairman of the library committee then reminds the group that cards must be filled out and filed for all books taken away from the library. The teacher asks for reports on the progress made by individuals on their separate projects. The bulletin-board committee reminds the group of two important newspaper clippings just posted.

In another room a seventh-grade group is conducting the meeting of the junior-senior-high-school assembly. A thirteen-year-old girl presides over a vigorous debate from the floor, taken part in by a dozen boys and girls. At its close a program of music and a short talk illustrated by a motion picture are presented by

representatives from the seventh-grade group.

In the social-science discussion room the social-problems club of the twelfth grade is having a vigorous meeting on the significance to America and to Russia of Japan's advance into northern China and Mongolia. Maps and charts hang on the walls. The tables are piled high with reference books and magazines, bulletins and pamphlets. Folders full of statistical facts supply definite data for critical discussion. Here is the group consideration of a vast amount of individual student research. The teacher, though not presiding, is an alert, subtle questioner and assistant guide to the discussion.

At noon the work of the busy lunchroom is largely done by students; they do most of preparing the meal, serving it, handling the money and accounts, cleaning up, maintaining order, and the like. Are there teachers, professional cooks, and managers to co-operate? Yes, of course, for this is an *educational* institution.

In the afternoon we pass from one alert group to another. In a

large laboratory some ninth-graders are building a miniature replica of the water-purification plant of the city. "It works!" one boy proudly exclaims, drawing pure drinking water from the outlet.

In a shop a fifteen-foot motor launch is getting its final coat of paint. Beside it several boys are tuning up a motor. Some others are working with a homemade radio. Engineering books and blueprints are being studied by several others.

In the Student Council Office the high-school court, with its elected judge, jury, and prosecuting officers, and its teacher adviser, reviews the cases of several real problems of discipline that are brought before it.

The School Council, composed of elected representatives from every group of pupils from the primary grades to the high school, and from the staff, is holding its weekly meeting to consider and decide questions of policy and administration.

In the school-newspaper office the editorial-board members are carrying on their individual and group tasks.

In the music wing of the building the band and orchestra and glee club meet for practice and discussion.

Members of the cast of the senior-high play are working with the juvenile playwrights and stage director on their new script.

At five o'clock several hundred young people and parents assemble in the auditorium for an illustrated lecture and discussion of some new scientific discoveries by the university's archaeological expedition in the Near East.

We return to the school after dinner in the evening. The place is ablaze with light. In the auditorium a group of several hundred grownups and high-school students are holding a community forum on the topic "If world war comes can America keep out?" In the panel, on the platform, both parents and high-school students take part in the vigorous debate which has been launched by an ex-army officer and a professor of European history from the university.

Meanwhile the laboratories, studios, shops, and library of the school are busy places. There are some young people of highschool age, but most of those present are grownups. In the elementary principal's office is a child-study class of mothers and fathers. In the fine-arts studios a score of adults are painting or modeling. A poetry class is reading and talking and having coffee together in a seminar room. Stage sets for a play are being built in one of the shops by another group.

Have we not had enough of illustrations to show the active group character of life in the new school? Here are no marching or sitting companies of young robots, automatically responding to orders from above. Here are live, dynamic groups of young people and old people living together. Here is a community of face-to-face groups, interpenetrating one another's minds, learning to co-operate by co-operating, learning social control by practicing social control, learning what government is by governing themselves, growing in aesthetic appreciation by creating original art products.

Education in the School-centered Community

"But are all these things going on in any one school today?" you ask.

No, probably no one school can be pointed to that has them all. But all of them or things like them are actually going on in various schools today. I have merely painted rapidly a sketch of what the life of a school can be now if the superintendent or principal exercises enough imagination to create them in one system.

If that were done, education in that community would reveal three novel characteristics.

The first is that "the school" is an institution in which people of all ages and all parts of the community come together. It is a community educational center; indeed, the community itself is educationally centered. In it every phase of community life is used as an agency of education. Every institution in the community becomes conscious of its educational possibilities and strives to live up to its obligations. This requires a drastic transformation of government, industry, business, and agriculture, the

press, the church, and other economic and social organizations. Today these devote themselves merely to producing food, shelter, and clothing comforts and luxuries, and to regulating economic, political, and social affairs. They do these things primarily on the motives of personal profit and self-aggrandizement. But they have a far more important function than that — namely, the educational task of studying the problems of community and national life, of planning and launching experiments that will bring about a progressively better individual and social life. Instead of policing and restricting individuals and groups the supreme function of government should be the development of an expressive program of life in the community.

The new conception is of a co-ordinated system of adult and child education reaching actively into every phase of community life — home, government, industry, trade, what not. Much too long we have thought of education in the community as the work of a "school system," a separate institution "teaching" children certain facts, meanings, and principles five hours a day, five days a week, thirty-eight weeks in the year. At long last we are conceiving of a planned, unified educational system integrating all the social agencies of the community and all the people at every age-level from infancy to old age.

Education does not stop at the twelfth grade or at graduation from the municipal university or even from a graduate technical school. In such a community education goes on throughout all of normal life. All life, if it is really life, is growing, and the very center of propulsion of that growth is education. "If I stop learning, I stop growing, and I die."

The "School" Becomes the Focal Community Institution

If every institution of the community is to be regarded essentially as an educational agency, — family, neighborhood organizations, government, church, and so on, — then the "school" becomes the most important one of all. The discussion of the defects of premachine family life makes its role very clear indeed. The

guidance of the all-round growth of the people of the community from infancy to old age is a professional matter that demands technical knowledge and actual experience in education. Understanding and sensitivity of the deepest kind — understanding of the economic-social political order, its history and its problems; understanding of human nature, its development and its problems; understanding of learning and growth; of aesthetics, of creativeness, and of appreciation.

It is, of course, impossible to expect such understanding in American homes or among the general population during the coming generation; hence it will be necessary to maintain a separate professional fraternity of educators.

Moreover, even if it were attainable, we should still need a definite professional organization to direct the growth of individuals and groups. If the community is to be "school-centered," then there must be an intelligent central direction for education. There must be a director or superintendent of education and an advisory board of education that will be a planning, thinking body, a true public-discussion group. Its meetings will be fine open forums attended by all interested members of the community. It will embrace continuing adult education as well as the improvement of child education in its program. It will stimulate the formation of discussion groups, the development of artistic centers of expression all over the community. What we have pictured as going on in one "schoolhouse" can be duplicated in every region of the community. All over the community there will be offices, laboratories, libraries, auditoriums and discussion rooms, studios, shops. Every center of the board of education will contain the paraphernalia for the work of active human beings, of any ages whatsoever, in studying, doing, creating, appreciating, discussing, listening and observing, criticizing and evaluating. But these paraphernalia constitute "The School" in the fullest modern sense. It becomes, then, the focal institution of the community. In it all the people join together in the processes of education.

Thus the Life of the School Becomes the Center of the Curriculum

Assuming, then, that in the coming years education will still be centered in a schoolhouse, that young people and old people will go out from it to an inclusive study of the community, the nation, and the modern world, what is the nearest approach to a School of Living that we can set up? There is one clear-cut answer: we can begin by building the whole educational program around the life of the school itself. That is the one point in educational reconstruction at which our practice need not lag behind our theory.

The life of the school itself can *now* be made the center of the educational growth — the life — of the young people. The school store, buying and selling real and indispensable supplies, is their store. They own it and operate it. The school bank, which the intermediate grades take charge of, is their bank. In it they handle real money and accounts; they save and invest their own money. All the processes of carrying it on provide the motive for a vast amount of learning and growth. The school newspaper and magazine and other publications are their own. The creative productions of studio, library, shop, and laboratory are their own.

Hence there need be no quibbling about getting "real life situations" into the school! Every situation in it will be real, intrinsic, worth while for its own sake. Nobody will say, as people frequently do say now: "But that is an adult problem! You should not 'drag it in'! Young people are not interested in that!" Everything the young people do will be a phase of carrying on the life of their own institution. Thus education, to that extent, will be real.

Moreover, the adoption of such a conception will swell the mounting chorus of pronouncements of educational leaders of the past two generations. Increasingly the life of the school will be active, not passive. The school will become life itself, not preparation for life. Education will indeed be the reconstruction of experience, as the new school becomes a place where wise teachers lead less mature persons in the conscious control of their experience.

CHAPTER XXII · A PREFACE TO THE STUDY OF THE BODY AS THE BASIS OF EDUCATION

CHARLES KINGSLEY tells how Tom the Water Baby, in the course of his education, came upon a school which filled him with unbounded amazement. The children had grown into the soil like flabby, watery turnips or dry and wizened reeds. They were incapable of play, even of movement, nor indeed did they seem very bright to Tom's adventurous imagination. They were acquiring facts and information against the approach of the examining master with his stick, and they had time for nothing else; with tears of despair they could only become momently more watery at the way facts and information escaped them.

Kingsley was having his dig at the manner in which school children were treated as disembodied intelligences. While facts were being poured in, their bodies were stowed into strait jackets to guarantee hours of immobility. He was illustrating the vast hiatus between theory and practice that we have been documenting throughout this book. Educational workers have, in the past, insisted upon having an active body outlet for the dictates of our minds, but in the daily practice of our lives we have denied it. Pretty largely, in the mass-school, we deny it today. Verbalization of the curriculum is still the inevitable accompaniment of this disregard for the flesh. To "say" is still regarded as ample evidence of true understanding. All too frequently the child who can describe a Greek dance, the Rosetta stone, or the action of an important muscle is called superior. But if he should act upon his verbal understanding and do the dance, sketch the Rosetta stone, or run with the muscle, it is not unlikely that he would be considered a problem.

Thus, among the educators of the Machine Age, schools were sitting schools, education was "book larnin'," sympathy went in sentimental waves to the physically unfortunate, and the greater praise was generally given to the weaker of two persons who were equal in mental equipment. Throughout it all, the mind was considered to be the sole basis of human personality.

How "Physical Education" Was Tacked on to Word Education

The conception of the human personality as an aggregation of separate entities - body, mind, and spirit - is well illustrated by the manner in which "physical education" was gradually added to the school curriculum as a separate enterprise. Throughout the first half of the nineteenth century body education received scant attention. In the 1830's several military academies were set up, and the Jahn system of gymnastics was introduced into various outdoor gymnasiums. Jahn was a German militarist known as "the father of German gymnastics," and his contributions were brought here by German refugees. There was also physical education through manual labor on farms or in shops, and "calisthenics." which had been introduced for girls by Catherine Beecher in her schools in Hartford and Cincinnati. In Boston the Normal Institute of Physical Education, an institution to prepare teachers in a "new gymnastics" for men, women, and children, had been opened in 1861.

It is an interesting commentary on the verbal nature of our curriculum that the legislation requiring hygiene-teaching had preceded the legislation requiring even the formal calisthenics by nearly twenty years. Although Ohio had required physical education by law in 1892 and North Dakota had followed suit in 1899, there was no further legislation until about 1910. This education was still in the form of calisthenics and gymnastics, and occurred almost exclusively in the large city schools. Up to this time gymnastics and calisthenics, the sum and subject of what body education there was, were taught incidentally and voluntarily. Lessons from five minutes to thirty minutes in length were

given, usually once but sometimes twice a day, their purpose being to counteract the effects of the sedentary life of the school. One can understand the limited grasp of body education throughout all this development in the schools when he realizes that even today state courses of study stipulate that "play at recess during good weather should be compulsory." One should be grateful, I suppose, even for play at recess, however compulsory, for it follows upon decades of sentimental reaction against play as synonymous with idleness and idleness as synonymous with sin.

By 1880 laws had been set up in forty different states, requiring the verbal teaching of physiology and hygiene, but many of them had accomplished little or nothing in behalf of real body education. They allotted, for example, a specific number of pages of school texts to be devoted to the effects of alcohol, and stated whether or not a text was to be used, but made no positive contribution otherwise.

Laws requiring medical inspection in the schools were passed during the latter years of the nineteenth century. Boston, in 1894, was the first to provide it. Chicago was next, 1895; New York third, 1897; Philadelphia fourth, 1898. By 1907 inspection was required in 90 cities. Three years later the number had grown to 337. By 1911, 19 states had laws requiring medical inspection, the number increasing to 23 in 1925.

School health inspection had come to America circuitously from Sweden in the 1830's. It traveled southward and westward through Europe and came to this country via Horace Mann's first report. It took hold very slowly, however, and was not made a systematic part of compulsory school administration until after 1890. The strange hodgepodge of superstition, neglect, and progress in school health education can be clearly read, however, in a report of a "health survey" conducted in 1913. That showed that of 2392 public high schools only 16 per cent were giving instruction in hygiene; of 758 grade schools only 76 had school nurses, and only 48 had school dentists; 25 per cent had individual drinking cups and 75 per cent had sanitary drinking fountains. Half of them used moist cloths for dusting; floors were washed from once a month to "never"; half had adjustable

desks. Ninety-five per cent of them taught the effects of alcohol and tobacco by lectures and out of books; 61 per cent taught how to treat tuberculosis; 48 per cent gave "first aid" instruction.

While "health" was being given in the schools via words, both intramural and interscholastic games had slowly taken root in our English-model Eastern colleges and academies and had been imitated in the growing public high schools after 1880. By the first decade of the twentieth century the idea that they would be useful in elementary schools also was gaining a grudging acceptance.

About that same time the first city playgrounds were formally organized. Even in the early 1900's the public playground was a new institution induced by the crowded conditions of our greater industrial communities. Educators saw that schools, by reason of their location, their compulsory nature, and their hold on child life, were the logical playground places for children. So, once the first ones were organized, others spread from community to community. But the schoolmen's use of playgrounds, like their acceptance of athletics even of the intramural type, proved that they still regarded body and mind as separate entities. Body education was still being added on to mind education, and the latter was regarded as the more important.

The Body as the Basis of Expression among Nature Peoples

Really to understand the climate of opinion which molded this attitude toward the use of the body in education, one should trace its evolution in the forming of our Western society. Although there is insufficient space for a full outline of that development, we shall clarify our problem if we note certain vital differences between the use of the body as the basis of expression among nature peoples, the production of the expressive pantomime dance among the more sophisticated river-valley civilizations, and the taboo concerning them in Europe and America prior to our own times. The volume of the data is so great that nothing more than a brief preface can be sketched here.¹

The first fact of importance to us is that all nature peoples employ the body rhythmically in the dance to a degree that is not to be found among industrialized modern peoples. When the American-Indian baby, for example, begins to walk, he learns to dance. His life from cradle to grave is expressed in music, and the song is seldom separated from the dance. One student reminds us that in accepting the gift of a horse, for example, the Indian sings his song of thanks as if he were astride the steed at the moment. and his tone becomes broken in pitch and roughened in quality, as if he were being affected by the wild movements of the horse. Words are not vital to him. His life is rhythmic song and dance, whether he woos, wars, works, prays, or gambles. In the primitive dance the body expresses what words are too inadequate to portray. Pueblo mothers dance through the entire night with their babies on their shoulders so that the little ones can engage in a kind of participation; they wake them up if necessary so that the children may not miss an experience so vital.

"A savage does not preach his religion," Ellis says; "he dances it." Among the Bantu of half of the African continent the dance is so much the basis of the culture that a member of one tribe greets distant kinsmen of remote tribes with "What do you dance?" Not "Where do you come from?" or "What is your country?" but "What do you dance?" Gesture and bodily movement, not verbal description, are seen to be the spontaneous symbols of the group culture.

Thus the nature peoples of the world — the Bushmen of the Kalahari Desert or the Ona of Tierra del Fuego, the Copper

¹ The bulk of it is to be found in the literature of anthropology, and I have noted useful sources in the Appendix, "What to Read." The finest single interpretation of the literature that I have been able to find is the chapter on "The Art of Dancing" in Havelock Ellis's book *The Dance of Life*. The interpretation which I give in the following pages is based upon (1) a brief survey of the anthropological literature; (2) momentary glimpses which I have had the good fortune to have as an eyewitness observer in southeast Africa, in the Malay islands of the Pacific, and in the West Indies; (3) a study of the history of the dance in Western countries in recent centuries and of the so-called modern dance in Europe and America in our own generation.

Eskimos of the Arctic Circle or the fuzzy-haired Papuans of New Guinea, to name but a few types — unhampered by the repressive bonds of rhetoric, dance their culture time-beat. The nature man utilizes every part of his physical being so masterfully that he dances even in seated postures. Ellis reports that he dances not only on his legs and with his torso, but also on his hands and knees, his arms and his fingers. In some districts of southern Tunisia there is even dancing of the hair, and all night long, until perhaps they fall exhausted, the marriageable girls move their heads to the rhythm of a song, maintaining their hair in perpetual balance and sway. Thus the body is the sounding board of ecstasy in a vast gamut of dances - religious dances and love dances, rain dances and harvest dances, war dances, marriage dances, and death dances. To dance is to worship, to pray, to build, to express the joy of achievement, to make love, to impose hate, or to make war.

Ecstatic Dance and Stylized Pantomime: Two Forms of Body Expression of Man and Culture

In each of the more complex, shall we say "advanced," cultures that have evolved during the past six or seven thousand years of recorded history, the peoples continued to employ the body as the basic instrument of personal or group expression. That was true of all the great ancient river-valley civilizations, from that of the Chinese around the Yellow River to those that bordered on the Mediterranean. There was a definite difference, however, between the dances of the nature peoples and those of the Chinese or the Siamese, of the peoples of India, Cambodia, Java, or Bali, or of the Egyptians or the Greeks. The ecstatic dance of the former — the nature peoples — was slowly replaced by the more intellectually patternized pantomime of the latter. For the proper understanding of adequate body education in modern cultures we should note briefly the essential differences between these two.

In the cultures of all nonliterate peoples the ecstatic dance is a basic means of release, expression, and communication. It is expression of the whole man, naïve, autointoxicating, relatively nonintellectual. It is the basic dance of the shamans of Siberia, of the Papuans of New Guinea, of the Westernized Negroes of Haiti or of their kinsmen of West Africa.

In the ecstatic dance, then, there appears to be little conscious control of the body to interpret through creative design a pattern symbolic of individual or group life. There is, on the contrary, as Ellis puts it, a taking of the "individual out of the self world into a self-forgetful union with the not-self." If design is achieved, it is spontaneous and naïve, not consciously produced by a controlled use of the body to make designed patterns. It is the abandon of selflessness, rather than the controlled use of the self.

As civilizations matured, the art of the dance became more sophisticated. The people learned how to invent movements. gestures, which we call pantomime, to join idea to organic emotion. In ancient China and Korea, in Pacific Polynesia and Melanesia, in the continental reaches from Cambodia, Siam, and India across the vast plateau of Iran to the civilizations of the Tigris, the Euphrates, and the Nile, the dancers created designed drama. Culture-conscious artists who saw the possibility of a controlled use of the body emerged. The pantomime dance became a sophisticated dance, much more than mere "autointoxication of rapturous movement." Idea was used as a control over movement. Symbolic gesture was consciously employed to aid the dancer's interpretation, which became both the personal imaginative expression of the dancer's own moods and impressions and his interpretation of his culture. So "storytelling"—the dramatization of the heroic life of their people, their legends and myths, their great personages, and the events which they made immortal in their culture-history — became an intermediate stage of development toward creative art in the dance, just as it did in the theater, music, literature, mural painting, sculpture, and the other arts.

Thus an expressive and interpretative ritual, an elaborate organized ceremonial, arose in each of the advancing civilizations. Although students of cultural origins are not positive in their identification of the original stimulus, they trace much of the later evolution from the Mediterranean region eastward to the Pacific and northwestward to the modern European countries. Egypt is regarded as "the mother country of all civilized dancing." Here also the more developed percussion instruments, which are fundamental to our modern orchestra, were evolved. The cymbals, the triangle, the tambourine, the castanets (which were later imported from Egypt to Spain), were made the instrumental base for the classic dance which was built up.

One obvious sign of the advancing maturity of the dance in each one was the creation of professional castes and the formation of schools for dancers. In Hawaii a special form of education was developed for the hula dancers, and a caste of professionals and teachers evolved. Similarly in Hindu India special Brahman schools were set up for the teaching of the sacred dancing girls. Thus the dancers became a group set apart; they were subjected to systematic education, and dancing became a profession. As that took place, more and more the dance became a spectacle to be looked at by the multitude, and the symbolic pantomime was done for the people, not by them as in the more elemental naïve stages when the group dance was sacred ritual.

The Arts and Body Education among the Greeks

It was in ancient Greece that the portrayal of man and his culture evolved in various art forms — literature, music, sculpture, theater, and the like. But especially in the two primary forms of art — architecture and the dance — did the Greeks reach heights achieved by no other peoples up to their day, and their educational understanding matched their artistic sensitiveness. Their form of the dance, like that of Egypt, was, as Mr. G. W. Cornish says, "a musical symphonic dance-vision, through which the history of Greece, and the souls of men are portrayed." Aeschylus, the Greek dramatist, is said to have developed the technique of dancing himself, and another Greek dramatist, Sophocles, danced in his own dramas.

There was a fundamental philosophical basis for this emphasis upon the dance among the Greeks. They were perhaps the first of all the Western peoples to design a school health program based upon the idea of the inseparability of the mind and the body. Witness Socrates: "Even in the process of thinking, in which the use of the body seems to be reduced to the minimum, it is a matter of common knowledge that grave mistakes may often be traced to bad health." And again: "What a disgrace it is for a man to grow old without ever seeing the beauty and strength of which his body is capable."

Aristotle put body education first: "The education of the body must precede that of the intellect." Repeatedly Plato advocated physical education, specifically deploring the excessive abuse it had suffered in their society. He insisted that physical education degenerated when it became separated from general education, and especially when it declined into professional provision of amusement for spectators, instead of enriching the performer's life itself.

Under the leadership of these artists and great thinkers education for the Greek elite (we must bear in mind that the masses. the slaves, received no education) came to be based on two fundamental subjects of instruction: gymnastics and music. We must not confuse the meaning of these terms with our own use of them. "Gymnastics" meant really the total education of the body itself, and "music" meant a broad curriculum designed to develop the intellect and the emotions. In classical Greek education the objective was the complete and harmonious development of the individual. Moreover, we must remember that it was based upon fundamental rhythmic concepts; Plato insisted that "man is by nature rhythmical," and Aristotle recognized that "rhythm, like imitation and harmony, was inborn." As a consequence of this astonishing development of body education among the Greeks, historians have frequently maintained that since ancient Athens there has been no perfect integration of body, soul, and society among civilized, Occidental peoples.

The European's Struggles toward Creative Expression

This is hardly the place for even a brief outline of the evolution of the arts of personal and group expression from the time of the east-Mediterranean cultures to our own. We must be content to remind ourselves that, in the forty to fifty centuries in which Western peoples slowly evolved more sophisticated cultures outward in all directions from the eastern-Mediterranean region, an interpretative theater, dance, music, architecture, and writing developed in each one. At times in various European national cultures these reached great heights of creative expression. These high spots were conspicuously illustrated, first, in the construction of buildings of original form and remarkable beauty witness the great cathedrals, town halls, royal palaces, town houses, and castles of the twelfth and thirteenth centuries; and second, in the Renaissance of the fourteenth to the sixteenth century — witness the astonishing development of painting, sculpture, and writing under the leadership of such artists as Giotto, Leonardo, Michelangelo, Albrecht Dürer, Titian, Raphael, Shakespeare, and Cervantes.

But by the beginning of the seventeenth century the great economic and scientific movements that laid the foundations for our new industrial-democratic culture (which we sketched in Chapters III and IV) were well under way, and the attitudes were forming which were to make impossible the general development of a creative use of the body in life or education for three hundred years.

The Body and Body Education in the Development of Puritan Society

Even to outline the factors that delayed the development of creative theater, music, fine arts, and dance — and hence of body education — until our own Great Transition would fill the pages of a very large tome. This is, of course, not the place to

give even the preface to that. Were I to attempt the documentation of the dramatic two-thousand-year history of European society from the decline of Greek culture to our own, however, I would write several large chapters on each of the following themes:

First, the exploitive, migrating traits of the Nordic traders who blazed economic routes from their Norseland southward across primitive Europe from the British Isles to the Black Sea, established settlements, developed agriculture and business, and evolved new kinds of political government.

Second, the success, by the beginning of the sixteenth century, of their ambitious warrior-leaders in amalgamating communities and political regions into great "national" states.

Third, the parallel evolution of elaborate national languages, the production of sophisticated, indigenous national literatures, and the consequent worship of the linguistic in education and the neglect of the organic body basis of life.

Fourth, the formalization and political organization of the Christian religion, the building by its officials of a wealthy ecclesiastical hierarchy and a powerful political state, which became owner of a third of the land of all Europe and dictated to kings and princes as well as to minor rulers and the masses of the people.

Fifth, the spectacular building of the scientific method of thought, including the invention of measuring instruments for accumulating "objective" data and subtle mathematical methods of classifying and organizing them.

Sixth, the consequent rise of the machine technology and corporate methods of mass production after 1750, and the world's greatest orgy of mining the virgin continents of the earth.¹

Since, in Chapter V, I have already described the traits of the Puritan mind that emerged on both Nordic sides of the Atlantic from these dynamic movements of the last three centuries, I will merely state them in succinct review and without regard to a rank-order of importance:

¹ These strands, together with the story of the Western world's experiments with political democracy, constitute the bulk of the material of my *Changing Governments and Changing Cultures* (Ginn and Company, Boston, 1932).

A firm belief in the concept of freedom for the individual, but especially in its application in the concepts of laissez faire, the profit motive, and the survival of the fittest in economic and psychological warfare; and an all-consuming interest in economic exploitation and in the material and social perquisites of success.

Outward conformity to the social conventions of the community and adherence to one of the dominant churches...life essentially a veneer overlying a base of uncertainty.

An inner life marked by fears and inferiorities and a behavior too frequently dominated by a furtive hypocrisy.

Ignorance of the truly creative process in any of the arts of life... tendency to import letters, fine arts, music, theater, and the dance from other cultures and to be guided by classic forms... imitation rampant in all the arts.

Education conceived as (1) something that takes place in a school-house aloof from the community; (2) something you do before you "enter life"; (3) something you do with verbal symbols.

That this verbal, disciplinary, exploitive climate of opinion would squelch creative qualities and lay emphatic taboos on the body was to be expected. For three centuries Puritan society turned the cortex over to educators to be tutored but said "thumbs down" on the rest of the organism. Similarly, whereas the early Christian churches had been organized in the form and spirit of the theater (old records assure us that the "Hymn of Jesus" was really a sacred dance, that early Cornishmen sang "The Life of Jesus" as a dance, and that medieval Europeans danced in their cathedrals as late as the fourteenth century), the later ones came to rely entirely on the linguistic reciting of ritual to emotional musical accompaniment.

This in briefest compass is the table of contents for the story of the setting in which body education was viewed in our modern Puritan society. And this it is that explains the ultramechanistic and linguistic character of all Euro-American education until these current transition years.

The Body as the Primary Instrument in the New Education

After 1900, however, the influences we have sketched in the foregoing chapters began to affect the concept of body education. The researches of the physiologists and psychologists and the clearer insight of such philosophers as Peirce, James, and Dewey gave educationists their cue concerning the organic nature of the human being and of his responses. Three of those especially centered attention upon the body as the primary instrument of personal development.

First, the human being is an organism, every phase of which—the frame, the muscular, nervous, glandular, and visceral systems—co-operates with every other one in the integrated action of the whole.

Second, the organism can respond actively with meaning only to the extent that it adopts appropriate bodily, mental, and emotional attitudes. The maximum of the "good life" can be lived only as the various traits of the organism are utilized in their proper relationships and at their highest efficiency.

Third, education is maximally guided growth, growth in every trait of the organism, growth in the proper use of the organism—physical, mental, and emotional.

The Increasing Recognition of the Rhythmic Basis of Active Life

There was a fourth concept that gradually emerged from a vast body of scientific evidence that accumulated during the building of the new psychology in the past half-century. That was the rhythmic character of the behavior of living organisms. Since I assembled that evidence in *The Child-Centered School*, I shall do no more here than to present a succinct résumé of it.

¹ Chap. XII, "The Rhythmic Basis of Life." See the references annotated in the chapter and in the Appendix ("What to Read").

We note first the rhythmic action of several hundred organs of the body and their integration as the determining basis of personality. As conspicuous examples we remind ourselves of the pulsating heartbeat, the synchronized periodicity of breathing, the characteristic time-beat and rhythm of movement in walking, the unique personal accent and rhythm in oral speech. The characteristic rhythmic tendencies of a human being in action are revealed conspicuously in the dance — whether in the ecstatic dance of nature peoples, in the stylized pantomime of more advanced civilizations, or in the consciously designed patterns and movements of the so-called modern dance. They show themselves likewise in the integrated nature of the responses of the singer, the orator, the actor, the musician, or the manual worker in any occupation.

Moreover, in fifty years of laboratory research, psychologists have documented the periodic nature of mental activity. Attention, for example, is not continuous; it ebbs and flows. One performs in a rhythmic order such tasks as tapping, estimating numbers, discriminating pitch, intensity, and quality of sounds, rowing a boat, running a typewriter or other machine, and using tools. Similarly laboratory investigations of reading and writing prove that the eye movements of the best readers and the finger-hand-wrist-arm movements of the best writers are rhythmic. The written as well as the spoken sentence exhibits the same rhythmic peculiarities of the individual.

The artist in the studio confirms the finding of the laboratory psychologist that rhythm is one of the basic elements in all the arts. Not only is it an obvious foundation of personal expression in music, in poetry, and in the creative dance; creative painters and sculptors also bring about subtle fourth-dimensional rhythmic qualities in their products.

We need not multiply examples, for the foregoing comments illustrate the rhythmic nature of human activity. To be alive is to be in movement, and each organ in constant tension has its own characteristic intermittence. Life itself is perpetuated because of this fundamental quality — the regular recurrence of pauses between stresses. The rhythmic basis of life, then, must

find recognition in the new education, for it is a fundamental characteristic of all human activity.

The Proper Use of the Body, Then, Is Central

The gradual acceptance of these concepts is now leading educators to see that the proper control of the body is of supreme importance. The body is not only the instrument of self-development; it is the organic basis of everyday living — walking and talking, communicating by speech and gesture, using tools, running machines, expressing ourselves by rhythmic control of movement, playing musical instruments, modeling sculptural materials, whatever. It is, then, the body in action that is to be regarded as the very matrix of the human self, the personality. Hence educationists are slowly coming to see that the proper use of this living organism is central to the whole enterprise of education.

Throughout this book we have frequently commented on the necessity of vast reconstruction in the operation and control of our mechanical civilization. We have predicted the success of our technologists in the coming years in designing and administering an efficient and humane economic and social system, and the building of consent among at least the more intelligent third of the general population. But what shall it profit us to create a \$5000-a-year-per-person society, if, in the midst of such economic security, our people are unable to use their individual, personal selves satisfactorily? It is clear that the solution to this problem is not to be found primarily in intellectual education.

As for my own view, the order of chapters in Book II will show that I would base the whole reconstructed education on the use of two primary instruments: (1) the social group, that is, the life of the school as a whole; (2) the human body. These are basic to all the other phases of the education of a man, since they induct him into his culture and practice him in the control of the self. In saying basic to all others, I mean indisputably the instruments; that the others cannot advance except through the use of these two. Hence I subscribe completely to the view that the body and the social group are the basic instruments of human education.

The New Trend

Under the gathering momentum of the innovations in childcentered education and of a clearer grasp of the organic nature of human response, a great variety of experiments in the use of the body in education emerged after 1915. Some of these came entirely from outside the schools, as in the case of parents who sent their children to private afternoon and Saturday schools of "aesthetic dance" or to such novel experiments as that of Don Oscar Becque's Children's Theatre Workshop in New York City. Others were more systematic attempts within experimental schools, like the F. W. Parker School of Chicago, to integrate "rhythms," or "eurythmics" (à la Dalcroze, Doing, Dobler, et al.), with the other parts of the regular school curriculum. Within the public schools, as educationists became dubious of the educational value of interscholastic gladiatorial spectacles, there developed the increasing use of intramural games, in which the great preponderance of all the students took some part. The child-centered laboratory schools also experimented with new integrations of pageantry, poetry, music, and physical education.

Thus in recent years the emphasis turned away from verbal teaching about health and body education and from mechanical calisthenic exercises to one or another form of conscious use of the body. Of the several important lines of dynamic body education that have been explored three stand out as of greatest potential significance: (1) various experiments in movement, the dance, rhythms, and the like; (2) one or another form of theater, including various integrations of music, the dance, pageantry, festivals, and choral speech; (3) intramural games.

Intramural Games

As for the third of these — the use of intramural games — we need at this point to say little. They are obviously superior to the formal calisthenics of the past as a means of building among the

total student population general bodily health and enjoyment of leisure time. They are more effective than interscholastic and intercollegiate competitive contests because the latter (1) confine participation in bodily activity to a few highly endowed gladiators; (2) build false loyalties to local and petty institutions: (3) cultivate the very competitive spirit which it is the aim of the new education to do away with; (4) commercialize physical education; (5) glorify professional athletic "coaches" at the expense of the more creative members of school and college faculties; (6) hamper studious attitudes and levels of scholarship, and otherwise detract from the real educational work of schools and colleges. For such reasons as these I can find no single justification for the continued use of interscholastic or intercollegiate athletics. So far as I can learn, the only persons who do justify them are professional coaches and players, managers of athletic councils, concessionaires and others who make money by their continuation, partisan alumni and administrators of institutions with potentially successful teams. Certainly it will be difficult to find a single truly educational leader who will advocate their continuation. As a partial corrective, then, intramural games will play a more useful role in the development of the new program of body education.

A Note on the New Conception of "Theater" in Education

But intramural games will constitute but a very minor part of the new program. The other two lines of development — those various activities which we have subsumed (p. 389) under two categories, "experiments in movement" and "theater" — appear now to offer much greater promise of making full use of the body in the new education. These are indeed so closely bound together that it is difficult if not impossible to separate them, and I shall not attempt to do so. On the contrary, I shall treat the new use of movement, dance, rhythms, pageants and festivals, plays and playmaking, choral speech, and the like, all as phases of theater.

In their new concept, "theater," the leaders of the new education are illustrating the organic approach to problems of life and education by integrating in dramatic activities all the processes and materials that can be utilized in individual and group expression. They incorporate into expanding streams of activities examples of rhythmic movement, vocal and instrumental music, dance improvisations and techniques, informal spontaneous dramatizations of ideas, writing and putting on more extended plays and pageants, choral speaking, and the like. So far as I have been able to discover, this conception of theater is the best single example that the new education has to offer of the organic approach.¹

If this conception were put into practice widely, it would revolutionize the program in body education. It would break down the traditional compartmentalization of materials and activities which, to be really effective, should be fused together. It would substitute natural movement for mechanical exercise, and competition with one's own best efforts, the essence of craftsmanship, for *laissez faire* in physical games. It would replace the memorization of the separated categories of anatomy with an intelligent command over the facts of body engineering. It would go far toward guaranteeing a wise use of the whole body in action as the central instrument in the control of the self.

The Need for Synthesis

This is my preface to the study of the body as the basis of education. Such a tentative theoretical statement cannot be carried into a description of practical program-making until the artist-teachers and students of the components of the curriculum develop a more systematic kind of experimentation. We have extant in laboratory centers, both public and private, scores of examples, creative bits, of body education. In the Detroit public high schools (and I have no doubt comparable instances can be found in other city systems) one can see Miss Ruth Murray

¹ Examples of this approach are given in *The Child-Centered School*, Chap. XVIII, "Self-expression and the Children's Theatre."

developing the use of the creative dance as a part of Miss Laurentine Barrett Collins's program of physical education for girls. In Don Oscar Becque's ¹ Theatre Workshops for Children in New York City (and under Ethel Hopkins in the Scarsdale Workshop) pioneers are building a unique developmental program in the theater, with the conscious fusion of movement, gesture, music, the dance in various forms. In a score of private schools, more or less child-centered, teachers of the dance, like Doris Humphrey, Martha Graham, Hanya Holm, and students of physical education are groping their way toward a workable program of body education. Under the leadership of such students of dance education as Professor Mary Jo Shelly of The University of Chicago annual "schools of the dance" are bringing the artists themselves together for research and conference.

What about the role of meaning in the new body education? Our emphasis on the functional use of the body and condemnation of the verbalism of the old physical education do not ignore or minimize the true role of ideas. Few consciously controlled activities are ever engaged in that are not shot through and through with ideas directed by them.

But the new program of body education will employ a very different set of ideas from those used in the old curriculum, and it will organize them in very different ways. As has already been said, the old one specified the memorizing of names and locations of parts of the body; the effects of using drugs, tobacco, alcohol; health rules; and the like. The new program will incorporate throughout the years of schooling many facts of the human organism — of its bones, its muscles, it glandular and nervous system, and the like. It will provide for an enormous amount of solving problems and drawing generalizations from actual examples of body activity. But this use of ideas will apply the principles of "responding with meaning," using ideas in functional situations, generalizing from situations of real significance to the student, and the like.

To consider a single example: Instead of despising the knowl-

¹ Mr. Becque is now director of the Federal Dance Project.

edge of the anatomy of the body the new program will be alert to guarantee a mastery of the new "body mechanics," or body engineering, that is now being developed.¹ Teachers will know the chief facts and principles and will be skillful in diagnosing and correcting strains in body management and movement. As Miss Todd says, they will know that "when poor habits throw the bony framework out of alignment it sags and bulges, slackens and totters, just like any other building that is defying engineering principles." Thus the body education of youth will be packed with the acquiring of accurate and useful meanings; youth as well as their teachers will constantly "observe how nature does her engineering . . . whether our purpose be better structural adjustment, better physical health or better voice production." The same principles will apply to the understanding of all other phases of the use of the body.

Certainly enough is known today to put together a magnificent experimental program of body education. The ideas are available, occasional artist-teachers and specialists are available, directors of intramural games can be found, and teachers of related arts are eager to participate. What farseeing school administrator will take the initiative, assemble the workers in co-operating teams, and give us a great program in body education?

¹ For example, by such scientific students and successful practicioners as Miss Mabel E. Todd and, to a less scientifically founded extent, by F. Matthias Alexander. See Miss Todd's First Principles of Body Balance and the new revision of her syllabus The Balance of the Forces of the Human Body. See also Mr. Alexander's Use of the Self, his constructive Conscious Control, and his Man's Supreme Inheritance.

CHAPTER XXIII · THE STUDY OF MAN AND HIS CHANGING SOCIETY: THE NEW SOCIAL SCIENCES

IN A true school of living the individual will be introduced to his culture by means of all the integrated activities of the curriculum. These will include the life of the school as a whole, the body-education activities, the intellectual study and discussion of social modes of living and problems, the arts of life, the physical environment - every phase of the program. Having discussed the organization of the first two of these we turn now to the problem of adequately inducting young people into the study of man and his changing society. I use the general phrase advisedly in the attempt to avoid the too narrow delimitation of such conventional subjects as history, economics, and the like. However, I append the more academic phrase, "the social sciences," to show that I mean by it any modes of living, problems, or trends that deal with the economic-political-social system. Moreover, I mean the three aspects of the culture that we discussed in Chapter II: the material civilization, the institutions, and the deeperlying psychology of the people.

As we have seen, there is an almost endless number of different ways of organizing the activities which can be used to induct the individual into his culture. In Chapters VII-IX inclusive we studied the conventional method of using a dozen or more school subjects. In Chapter XIX we examined the evidence in support of the new trend toward broad units of understanding and participation, the content of which reaches across the boundaries of several conventional subjects.

At this point, therefore, we shall accept the implications of curriculum organization that were set down there and turn directly to the question of the content with which youth shall carry on the study of man and his changing society.

Theme-concepts of Modern Culture: One Guiding Principle of Organization

In building for himself a realistic portrait of modern society, the curriculum-maker will be confronted by a novel and difficult task in the organization of content. Hundreds of problems and issues in industry, agriculture, government, social life, and international affairs will besiege his mind. Thousands of important generalizations about group life will overwhelm him. A maze of factual detail will bewilder him. To be intelligible either to educational workers or to young people these details must be organized in accordance with some principle. What shall that principle be?

A bold outline is needed, a compact body of great central ideas. From the last fifteen years of professional study I am convinced that this skeleton will consist of two types of psychological material: (1) the characteristics and chief trends of the main societies on our earth today (with special emphasis on our own Western society); (2) the outstanding problems and issues (individual and social) which these societies face. The former especially will guide the designing of units of study in the elementary school and the junior high school; around the latter will be organized directly the intellectual work of the senior high school, the university, and the adult study group. Together they will provide a sure basis for understanding our modern cultures and their problems.

Gathered together from our earlier studies and stripped of elaborate illustrations, these problems will now be outlined.

Basic Characteristics and Trends of Human Societies

THE CULTURES OF PEOPLES

The all-embracing concept is that of the cultures of peoples. As we have illustrated in Chapter II, culture will be shown at its three principal levels: the surface civilization, the institutions of the people, the psychology and philosophy of the people.

Furthermore, the social-science program will distinguish the three types of culture in the modern world: (1) the interdependent, industrial cultures (for example, the United States, Great Britain, France, Germany, and Japan); (2) the fairly self-sufficient agrarian-handicraft cultures (for example, China, India, Russia, the nations of eastern Europe, and the like); and (3) the cultures of seminomadic and less developed peoples (for example, the Bantu tribes of Africa, the Malays of the South Pacific, and the Arabs of the Near East).

INDUSTRIALISM

It is also of major importance that youth around the world shall grasp clearly the supreme role of industrialism and the central revolutionizing concepts which, after 1600 A.D., produced the dominating Euro-American industrial civilization.

The first factor, as we have seen, was that of machine technology. Recall the three great contributions that laid the foundation of our power-driven civilization: (1) the scientific method; (2) the invention of practicable engines with which to convert energy; and (3) the harnessing of engines to machines.

The second factor was that of corporate control. The devising of vertical and horizontal corporations made possible the concentration of gigantic amounts of capital in a few hands, and helped to bring about standardized mass production, interchangeable manufacturing, and specialization of labor. Thus private owners' control over natural resources, over money and credit, and over men was guaranteed.

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The third factor was the idea of laissez faire — individual freedom to compete for private gain.

Accelerating Change

The central historical concept of the social-science program is accelerating change. The cultures of the world are being transformed with increasing momentum. Correspondingly the generation shortly to be given the responsibility of self-government must be practiced in the attitude of expectancy of change: change in the productivity of the economic system, change in economic and social government, change in political government, change in norms of living and in objects of allegiance.

CHANGING STANDARDS OF LIVING

Far-reaching transformations have already taken place in the cultures of every industrialized people. Let us recall some of the more important ones. First is a changed standard of living. The stable, self-sufficient, and comparatively secure agrarian community of a low standard of living has been transformed into the interdependent, unstable, insecure industrial community of a high standard of living.

Loss of the Worker's Control

A second change is the loss of the worker's control over his own living—over his product, his job, his share of the social income, and his craftsmanship. This control is now held by the middlemen manipulators of money and credit; hence the increasing dominance of promoters and financiers over the producers and creators.

NATIONAL COMPETITION

Third is competition on a national scale. Several great national production plants were hurriedly erected; these now compete madly with one another in a tenuous world order, each utterly without central control and lacking central design which fits its production and distribution to the needs of its people.

ECONOMIC NATIONALISM

Fourth is the rise of a dangerous economic nationalism in every continent, marked by the erection of trade-destroying tariff barriers between trade-starved peoples, and a mad race for raw materials, markets, and supremacy in armaments which creates continuous international friction and the threat of war.

CHANGES IN POPULATION

Fifth is the change from a static, sparse population to a dynamic one of positively accelerating growth until the period of the World War, followed by the change back again to a negatively accelerating growth, with the prospect of a static, permanently dense population about the middle of the twentieth century. Correspondingly urban population has greatly increased.

THE DEMOCRATIC EXPERIMENTS

Sixth is the world-wide experimentation with political democracy and the basic assumption of "government by the consent of the governed"; also the vitiating of this assumption, even today, by the practicable operation of the concept of *laissez faire*, by vast individual differences in ability, by the lack of machinery for giving consent, and by the lag of a realistic education in economic and political government.

NEW CONTROLS OVER THE PUBLIC MIND

A seventh factor is the rise of a world-wide system of swift communication, which makes possible the prompt formation of the public mind by propaganda and censorship. Also important is the fact that the press and other similar agencies of each nation are controlled by special economic groups.

These are a few conspicuous examples of the great characteristics and trends of modern culture, which, as Comte said, "rule the world or throw it into chaos." These focus sharply the study of society. They condense the bewildering maze of the meanings of modern civilization into a clear outline. Hence these themeconcepts will increasingly serve curriculum-makers as the organizing thread of the new program in the social sciences.

Problems and Issues of Modern Civilization: a Second Principle

But the curriculum-maker needs more than a statement of the characteristics and trends of our new industrial-democratic culture, important though they are. These, it is true, will go far toward guiding the construction of the social program of the elementary school and junior high school. But for higher and advanced study the educational worker needs, in addition, to focus directly upon the unsolved problems and issues of the social order. As we have seen, it is only in this way that the intelligent consent of a democratic people can be guaranteed.

Once again we have recourse to the scientific students of society. What do they tell us are the crucial problems that beset our people?

They tell us first that, although these problems encompass every phase of human culture, — economic, political, social, religious, aesthetic, — at bottom they are economic. Although all are inextricably intertwined in the total problem of understanding and rebuilding our industrial-democratic culture, the foundation is economic reconstruction. Hence coursing prominently through every year of "social study" — from the kindergarten to the adult-study institute — will be a central economic strand. With the discussion of that strand, then, we shall begin our outline of the problem-content of the new curriculum in the social sciences.

The Scientific Approach to Economic Problems'

The scientific student of society in the schools will center his study upon three fundamental questions: First what are the available physical and human resources? Second what are the needs of the people, for food, shelter, clothing, transportation, communication, recreation, and the like? Third what kind of production-and-distribution system shall be set up to make and give the necessary goods to all the people?

He will regard the problems of the economic system as he would regard the solution of an engineering problem. Given

so many people to be provided with the highest standard of living possible;

so much in available soil, fuel, metal, timber, stone, fiber, fertilizers, and other materials;

so many research students, trained executives, skilled technicians, and workers;

appropriate climate conditions;

what quantity and kinds of farms, mines, factories, warehouses, centers of exchange, and railroads, telegraphs, postal service, and other means of transportation and communication must be set up and operated to give all the people the highest possible minimum standard of life? Of course the answers he will seek will not be the technical answers of the social engineer; rather they will approximate the understanding of the intelligent layman.

I. "What Is an Economic System For?"

Any careful study of these problems must answer this prior question first. To make a scientific study of a problem the solution of which is colored by conflicting human desires and preferences, each student must, individually, decide what his attitude

¹ This section is based upon the statements of problems in Harold Rugg and Marvin Krueger's Social Reconstruction (The John Day Company, New York, 1933), pp. 58-68 and occasional other excerpts.

is to be. In this instance he must ask himself: For whose benefit shall physical goods be produced? For a small or a large percentage of the people? For the owners of the resources? For the persons who convert the resources into useful goods? For all the people?

We shall note that various answers are given to this question. Some feel that each individual should be left free to get as much of the world's physical goods as his energy, talent, and ambition permit. Others would provide a minimum for all before anyone is allowed more than that minimum. Between these points of view there are others, modifications of one or the other. Some scientific students point out that there are minimum physiological and psychological needs which must be provided for the maintenance of a healthful and complete life. They believe that such minimum needs are an imperative first charge upon the resources and facilities of the economic system. They would guarantee to all the highest minimum commensurate with the efficient running of the system. (Some would provide a variable return for differences in talent and contribution.)

But each of us must answer this prior question: What is an economic system for? All other questions of social reconstruction depend upon the answer given to it.

II. Insistent Problems of the Production System

I. What Are Our Available Physical and Human Resources?

To answer this question students will survey briefly the estimates of the natural resources of the country. They will note that the modern economic system requires vast amounts of "natural resources" — for example, fuels; fertile soils located in a productive and stimulating climate; timber, stone, cement, metals, and other constructive materials; fibers; and fertilizers.

Students will also survey the estimates of the available farms,

mines, factories, warehouses, railroads, telegraphs, telephones, radios, business and financial offices, wholesale and retail stores, and the like. They will then be able to form judgments concerning our natural resources and the capacity of the existing production-distribution plant to produce and distribute the necessary goods.

Furthermore, students will study the facts about the human resources of the present system. They will note data on the number of trained, skilled persons available to carry on the economic order.

Thus students will lead to further questions and problems. For example: To what extent are the natural resources being reduced by inefficiency in utilizing them? Where it appears that the resources are limited, is anything being done to provide substitutes for them? Should this be done by government or by private industry? And, finally, what determines the quantity of resources made available for consumption?

2. WHAT ARE THE PHYSICAL NEEDS OF THE PEOPLE?

Our new program will point out that this question too can be answered by reference to the facts concerning diet, nutrition, health, housing, clothing, transportation, communication, recreation, and the like. A meticulously exact answer is not required; on the contrary, only a general ascertaining of minimum needs is desired. This can be done by reference to the many estimates of the purchasing power needed to give a stated level of physical life. Various recent reports and studies of this problem will be read and an approximate answer given to the general question About how many dollars (1913? 1929? 1934?) of purchasing power does each person need to live on a stated standard of life?

3. What General Standard of Living for All the People Do the Resources and Technology Make Possible?

Steadily the facts, sufficient for the study of student-citizens, will be brought together and focused directly on the recent

evaluations of the total problem which have been made by various scientific students. We shall note how these students ignore the present limitations imposed upon the productive capacity by private ownership, by questions of supply and demand, by desire for profits, by business slumps, by the curtailment of production, by the desire for monopoly, and the like. They are concerned only with one fundamental question: If the existing production plant were put to work at its fullest capacity, what volume of physical goods could be produced?

Note such essential points in their analysis as the following: So far as the production of goods is concerned, there is no need for scarcity or want. They also give various estimates of the extent to which productivity can be increased and of how high a standard of living this would permit.

The analysis of these students is based on existing machine technology. They estimate what further increase would be possible if obsolete and outworn machinery were replaced by new, efficient machines, and if existing improvements in machine technology were put into practice. Furthermore, they show that competent managerial ability and technical skill are available to operate the existing production plant, and that the production plant itself has never been used to its capacity.

To summarize the analysis at the proper point such questions as these will be considered: To what extent could existing productivity be increased? What factors prevent the use of the production plant to its fullest extent?

4. How Many Hours of Work Are Needed to Produce A High Standard of Living?

The questions above take us to a consideration of "hours of labor." This problem is really twofold. First is the problem of technological unemployment, of finding work for men displaced by increasingly efficient power-driven machinery. Second is the problem of the unemployment of technology, and the setting up of a system in which the production plant will be operated to its maximum capacity.

Youth must study the evidence concerning the increasing output per worker and the declining number of hours needed for the operation of the production system. They should note especially that the use of power-driven machinery has steadily increased the output per worker. How many workers, then, are needed to satisfy a demand for goods equal to that of 1929 and of 1934? Also, former bases for determining wage rates no longer apply. What shall determine the wages to be paid and the number of hours to be worked?

Furthermore, the production system must be kept in continuous operation at full capacity to keep the workers engaged. Technological students ask if this can be done under a profit system. They also note that the return to the workers must be large enough to enable them to buy the goods produced. Can industry pay such wages and make a profit too? Will it do so voluntarily?

Finally it has been established that a high standard of living for all can be produced in a working day of from four to five hours. This, of course, does not mean that the problems of the production system have been solved. Many complex and important questions confront us today.

III. Insistent Problems of Distribution

THE CRUCIAL PROBLEM: How to CREATE ADEQUATE PURCHASING POWER AND DISTRIBUTE IT TO ALL THE PEOPLE

Our study has, then, brought out the fact that the existing production system is capable of producing a high standard of living for all, and that this can be accomplished in a short working day. We come now to the problem of finding a way to distribute the goods to the people. A first, basic question is How can sufficient purchasing power be created and distributed to enable the people to buy all the goods produced? A second and subsidiary one is What elements in the existing distribution system prevent an adequate supply of purchasing power?

What is the Basis for a Scientific Distribution of Purchasing Power?

Our program will constantly seek to reflect the attitude of the scientific students toward real measures of wealth. They base their study of the production-distribution system upon the belief that the only real basis of wealth is physical energy. This includes all the energy in the natural resources and the human resources of the people. With this point of view, therefore, the amount of purchasing power to be distributed to the people should be determined by the volume of useful goods produced by means of the technical arts—agriculture, industry, and commerce.

Hence, they say, all who contribute to the production of goods and services shall receive the minimum of purchasing power. They believe it is possible that some who make an unusual contribution or have justifiable needs that are larger than others, which should be satisfied, may receive more than the minimum — but not until all have received the highest minimum which the system can supply. Moreover, with the exception of the physically or mentally handicapped, only those who "work" should share in the distribution of the goods produced.

How the Scientific Distribution Would Affect "Middlemen"

The scientific student studies the steps of distribution from the point of the completion of the finished product until the goods reach the consumer. He finds that many "middlemen"—wholesalers, jobbers, brokers, commission men, retailers, what not—handle the goods, each one adding a charge to the cost.

No more important economic problem confronts our people than that of determining with some scientific adequacy the number of middlemen necessary for the handling of goods. That is, how directly can the product be taken and delivered to the consumer? What are the necessary "charges" that must be added to the cost for this middleman handling?

The Role of Money

Students must now confront this question: What is purchasing power? Many persons will answer, "Money." The reason for such an answer is that money is the medium generally used in exchanging goods and services. A characteristic of all scientific units (for example, inch, pound, bushel, and the like) is that they always represent the same amount; that is, they are constant measures. Hence, if money is to be used as a scientific medium of exchange, it must have a constant value; for example, "a dollar" must always "be worth" the same amount of goods or services.

Let our students study the history of money in order to understand its stability as a unit of exchange and the important part it has played in the distribution of goods. Note especially how metal and paper money came to be issued; the instability of the monetary units; how banking became a regular trade and what services are performed by banks and bankers; the development of the "check" system; the creation of credit by banks through bookkeeping transactions; how the control over money by banks gave them increasing control over the production-distribution system; and the influence of bankers on credit, prices, wages, and thus on the whole production-distribution system.

Note also the basic question which the scientific students of the economic system ask: What kind of medium of exchange will permit the production plant to operate to its fullest capacity and at the same time create sufficient purchasing power to buy the goods produced? The chief requirements, according to these students, are that it must be flexible enough to permit any needed increase in productivity; it must represent real value; it must be redeemed or taken out of circulation when the value it represents is consumed or destroyed; and it must be large enough in volume to furnish adequate purchasing power to buy the goods produced.

Can the People Buy the Goods Produced and Pay Their Debts Too?

One considerable limitation on the purchasing power of the people is the amount of money regularly demanded to pay off old debts. These now include debts on farms and homes, land and personal property; debts for factories, equipment for production, railroads, and other parts of the production-distribution system; debts for national-government expenses — relief, war, and the like. The total debt of the American people is estimated to be about \$250,000,000,000,000, and approximately one fourth of the annual national income is used to pay the interest on this debt.

Hence the problem is vital to the study of purchasing power. If these interest payments (and also principal payments) are made, will there be enough purchasing power left to buy the goods produced? Will the purchase of goods have to be curtailed? If it is necessary to devote all the purchasing power to the buying of goods so as to keep the production plant in operation, what will happen to the debts?

Let the students study the history of debt in the building of the economic system and the relation of debt to the problem of purchasing power. For example, they should note the rate at which the public and private debt is increasing, and the ways by which this debt structure can be reduced or eliminated. If this debt structure is reduced or eliminated, is there any way to prevent another one from being created? If purchasing power were increased to the extent of providing a high standard of living, could mortgaging the future be prohibited?

NEED OF PARALLEL STUDY OF GOVERNMENT

There remain for consideration other vital problems of the economic system — to name a single example, the need of a design for the control of the production-and-distribution system. But to comprehend these problems we must understand the manner in which political and psychological factors underlying recent social trends are inextricably intertwined with the economic ones.

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Recall here the discussion of the experiments in political democracy, which were described in Chapter III. The idea of *laissez faire* and its important influence were also explained there. Here we shall note further problems that were created by individualism in business and government, as well as important international questions.

Problems Created by Individualism in Business and Government

T. PROBLEMS OF ECONOMIC DEMOCRACY

First let us consider the problems created by the theory of laissez faire. This driving idea of "compete and achieve success," which impelled the erection of the modern production system, was even more than an economic incentive; it became the dominating concept of the 'American dream." An important question must be studied: Since a production system has now been built which can satisfy more adequately the needs of the people as a whole, has not the time come when the usefulness of the doctrine has passed? Does not the doctrine of laissez faire stand in the way of devising an adequate system of distribution?

To summarize the concept of laissez faire, note the extent to which the doctrine was necessary for the erection of an adequate production system; how it provided the impetus to industrial growth; what economic groups rose to power in industrial affairs because of it; the extent to which it was a rationalization of the desire to make profits, control industrial affairs, and exploit economic resources; and the extent to which government has been successful in curbing the evils created by the principle.

Then evaluate the view that under the present interdependent and tenuous system the doctrine must be discarded. Note the need of control over the production system, owing to the specialization and interdependence of modern industrialism... the increasing interference of government in industry... the fact that during certain periods, such as that of the World War, when efficiency was imperative, the government discarded free com-

petition and instituted control over production, prices, wages, and other elements of the economic system... the fact that existing regulation of economic activity is almost solely national, whereas resources, markets, and investment are international in scope.

2. PROBLEMS OF POLITICAL DEMOCRACY

Second let us consider the relation between economic and political democracy. Note (1) to what extent the history of government in the last three centuries was the story of the struggle between contending economic classes for power and (2) how greatly economic power has determined political control.

Has political democracy passed beyond the experimental stage? We have noted in the long history of democratic experiments in government that it has been assumed that the individual has the right to give or withhold his consent to the acts of government. To what extent has this right been exercised? To what extent has political government acted upon the real consent of those subject to it? And can it be said that a person who lacks the necessary factual knowledge and educational training has given his consent?

Furthermore, we should consider whether the people have sufficient understanding of political affairs; whether the system of political parties has left room for individual choice of candidates and individual expression of attitude; to what extent economic power has controlled legislation and judicial interpretation; and how sectional interests, concentrations of population, and wealth have influenced national political policy.

Problems of Nationalism and Internationalism

America in a World of Competing Nations

Both the scientific students of our economic system and the educational workers must confront in their work the interdependent and complex nature of modern civilization. They must face the central problem: Can a nation live unto itself?

Industrial countries are no longer self-sufficient, whether within themselves or among themselves; they all depend to varying extents on remote agricultural parts of the world for materials, for markets, and for places to invest their surplus capital. Though we in the United States have within our boundaries a vast supply of natural resources and can, therefore, be more self-sufficient than most of the other nations, nevertheless our economic well-being too depends to a large extent upon uninterrupted trade with other countries.

DESTRUCTIVE NATIONALISTIC COMPETITION

The designers of economic, social, and educational systems, therefore, must see that the peoples of the earth confront a dangerous impasse. Because of their interdependence there is an imperative need for wholehearted co-operation, instead of which there is a strong tendency toward economic and armed conflict. It is of great importance, therefore, that our youth be introduced to the international background of contemporary economic and political problems. From primary school to adult-study class they must be taught to see the factors which play the most important roles in current international problems.

Some of these are outside the realm of issue; they are established historical fact. For example:

The building of intense nationalistic attitudes by organized propaganda and censorship.

The creation of world-wide empires in defense of national business interests.

The secret diplomacy of governments with their economic and political alliances.

The increasing international friction.

The First World War and the subsequent issue of war-debt payments. The acquisitiveness of nations, comparable to the acquisitiveness of individuals.

The influence upon international policies of strong economic groups within each nation.

The need of certain nations for resources and markets outside their boundaries and for extra territory for their excess population.

The entrenched policy of each nation to export more than it imports so as to have a favorable balance of trade.

The tendency of a national army to follow the traders of the nation, so that it can protect citizens and their interests in foreign countries.

Note also the effect on international relations of the marked differences in standards of living in different countries. Finally consider the endangering of the peace of the world by the wide-spread assumption on the part of Nordic peoples that they are racially superior. Since the World War this trend has suspiciously sharpened, and today lies at the base of serious injustice, limitations of opportunity, and attitudes of superiority on the part of the leading nations of the world.

WORLD PLANNING

Such historical study will make clear that a world plan is as utterly lacking at the present time as is national or even regional planning. The whole economic and political system grew up quickly under intense and universal competition, utterly without design or control, and only now are nations beginning to realize that their separate domestic systems cannot function properly unless they are carefully planned. In the meantime the basic international problem is Can a stable and adequate system of world production and distribution be designed within the existing capitalist structures of the nations of the world?

The scientific students and the young people of America should consider whether international problems are approached and analyzed scientifically, and whether they can be so approached; whether national or international planning should come first; and what the first steps in international planning would be. They should study such questions as these: Would regional planning by neighboring nations be more likely to succeed than world planning? Indeed, is world planning possible in view of the fact that the resources and means of production are privately owned? What are the effects of such movements as Fascism, Hitlerism, and Communism? Is nationalism compatible with world planning? And, finally, students should note the chief obstacles to

the effective work of such agencies of world planning and cooperation as the League of Nations, the International Labor Office, international conferences, and the like.

WORLD WARS

After studying these and similar problems, many scientific students have concluded that international planning is not possible under the present conditions of private capitalism. The storm centers of the world lead them to insist that the war of 1914–1918 is merely the first of a series of inevitable "world wars," which may engulf and destroy industrial civilization. They point to the conflicts in Ethiopia and northern China, in the Polish Corridor, in Latin America; to the boundary disputes arising out of the Treaty of Versailles; to the war of Asia against the exploitation of Western countries; to the Irish Free State–British conflict; to the unrest in Africa; to the Russo-Japanese friction; to Italy and Irredentism, the Arab-Jewish conflict in the Near East, and many others.

These, then, are the chief international problems for America to confront and to solve in these transition years. Especially must American youth be brought to understand domestic affairs, lying within our own boundaries, in the light of the international situation. They will constantly question whether the old interpretation of the Monroe Doctrine any longer fits the American need. Certainly educational workers and their students must study and reinterpret our position in the world of nations if tragic mistakes are to be prevented.

Need of the Study of Proposals for Reconstruction

THE LACK OF DESIGN IN THE EXISTING SYSTEM

Such a developing study will establish clearly that the existing economic system is chaotic, out of control; it does not provide the high standard of living which is made possible by the production system. The historical study will reveal the essential reason — that the system evolved so swiftly that design and central control were impossible. It is clear, therefore, that Americans, in company with other industrial peoples, must find a way to reconstruct their system.

Hence our students must study thoroughly and objectively the chief proposals that have been made for reconstruction. At least four different points of view must be considered:

First the point of view of the scientific student of the economic system. What must be done concerning production, distribution, control, and other problems, in the light of established facts? (This was discussed earlier in the chapter.)

Second the point of view of those who would retain private capitalism and would set up some form of design and social control.

Third the point of view of "Fascism." Students should ask searching questions to bring out the extent to which this provides for the reconstruction of the system.

Fourth the point of view of those who would change the private-ownership basis of the existing system — that of the Socialists and of the Communists.

PLANS FOR CONTROLLED PRIVATE CAPITALISM

Since the breakdown of the economic system in 1929, many businessmen, economists, publicists, and politicians have agreed that various parts of the production-distribution system must be controlled and planned. They believe that the operation of such a complex and interdependent system can be left neither to chance nor to ruthless competition. With the Roosevelt government they recognize the need of planning and of some kind of central control over industry, business, and finance.

Let our youth study these proposals for controlled private capitalism. Some aim at permanent control imposed by government or assumed voluntarily by industry. Others are temporary measures designed to relieve distress.

Study the various types of plans: (1) the comprehensive plans of Beard, Chase, Soule, La Follette, Swope, and others, which pro-

pose a more or less general reorganization of the economic system; (2) plans for agricultural reconstruction, such as those of President Roosevelt, Pitkin, Mead, and Ostrolenk; (3) plans for creating employment in a depression, such as those of Graham, Deane, Norton, and others; (4) plans for unemployment insurance.

Ask whether these plans present programs of reconstruction. Do they exercise control over industry and trade? regulate the amount of goods produced? create and redistribute purchasing power? suggest changes in the monetary system? eliminate unemployment? reduce or remove public and private debt?

To summarize the study, consider these important questions:

- I. To what extent do the plans emphasize the need of some kind of collective control over finance, industry, agriculture, and trade? Is it to be temporary or permanent control?
- 2. Is control to be exercised by industry, by agriculture, by government, or by all? Is it to be voluntary or imposed control?

BACK TO BARTER: PLANS TO HAVE THE WORKERS PRODUCE THEIR OWN GOODS

Our youth should also study several plans which propose that the unemployed workers produce their own goods. One conspicuous element in them is the recognition that, given raw materials, available workers, and some machinery, a productiondistribution system can be set up to furnish the workers with goods. The aim is production for the use of those who produce. Production for profit is not allowed.

The feasibility of this type of economic organization is evidenced by the fact that, throughout the United States, hundreds of barter organizations have been established which successfully supply goods and services to those engaging in the scheme.

Equally Urgent Social Problems

This must conclude our brief outline of economic and political problems and issues. Paralleling them are social, ethical, religious, and aesthetic problems that are equally insistent. We have space for only one example from certain of the more pressing social problems.

PROBLEMS OF THE CHANGING FAMILY

We have already noted how, in the midst of swift economic and social changes, the varied functions of the family of premachine days have changed. We contrasted the pioneer life of the American family before 1890 with life now, noting that as production is carried on more and more by machines, each member of a family has tended to take up work different from that of any other member. Thus different interests have gradually developed which take the individuals into different groups; the father finds one group of friends, the mother another, the children still others.

Every phase of home life has altered. The size of the family itself, the houses in which we live, and our recreation, all have changed and are still changing. These changes did not at first take place rapidly, however. They began about 1890, and appeared more swiftly after that date.

Let us consider some of the changes that have influenced family life. One is the gradual disappearance of one-family dwellings with large yards and lawns, and the increase in crowded multifamily dwellings. Another is the fact that the home is not the recreational center it used to be; it has become more an occasional meeting-place. Still another is the size of the family. Whereas in 1850 the average family consisted of 5.6 persons, in 1930 it consisted of 3.9 persons. Also, divorce was almost unheard of in early American history. An example of the increase in divorce is provided by the statistics of a typical county in Illinois: in 1887 there was one divorce to every thirteen marriages; in 1924 there was one divorce to less than five marriages.

There have been other changes. Today, for example, much of the preparation of food is done outside the home. The family laundry is done increasingly by machine laundries. Electricpower utensils have taken the place of many old hand-run kitchen appliances. Clothes are bought ready-made or are made on electric sewing machines. Note, too, the influence of the ever increasing invention of power-driven machines; of the increased use of automobiles and telephones; of the improvement of motion pictures; of the invention and widespread use of the radio; of the rapid increase in the number and kinds of organizations—fraternal societies and the like; and of the movement toward universal and extended education.

OTHER PROBLEMS OF COMMUNITY LIFE

The Industrial Revolution produced similar changes in the neighborhoods of the nation. Communities in 1800 were groups in which people knew their neighbors intimately and saw them every day. In the absence of cars, radios, movies, and daily newspapers, direct word-of-mouth communication was the chief form of recreation. Now, with the coming of industrialism, the forms of recreation have changed, and both the actual and the imaginative life of former "neighbors" has enormously expanded. Even work itself now takes both men and women much farther afield than it did in former days when often one's labor was done in his own home. Everyone sees less of his neighbors and is less interested in their lives. Racial and religious differences are more and more likely to exist side by side. People are likely to move oftener from place to place, breaking off all community ties. Thus changes in the neighborhood bring unique problems to modern living.

Other problems of community life parallel those to which we have just referred. As economic changes have taken place, especially since 1900, the time-beat of urban life has rapidly increased the recklessness of the people. The automobile, the general development of the Second Industrial Revolution, the rise of great cities with their increased anonymity, the acceleration of the rhythm of urban life — these and other factors have produced much more difficult problems of crime than any earlier generation has ever encountered.

The hectic physical and social experimentation which we have described was perhaps the true measure of the extent to which men's inner lives also had become upset. One by one the loyalties and ties to which the American of the later nineteenth century had clung and which he had passed on to his children disappeared.

All these changes, therefore, present to the scientific students of social reconstruction typical problems which must constitute an increasingly important part in the curriculum of the new school.

We have discussed now some of the problems of design that are engendered by the constant, rapid changes in American life. Toward one goal the solution of all these problems is aimed—the achieving of an adequate economic-social structure, the building of a system which will provide a fine standard of living for everyone and will free everyone from economic insecurity. The educator must see and know these problems in order to fulfill his function as educator—namely, the gaining of intelligent consent to a new order of things. He must, moreover, plan a new philosophy of life and education based upon this understanding. Otherwise he is merely one of an aggregation of blind teachers leading blind followers—instead of being a leader who understands the problems of social design and who can therefore provide new loyalties to the students to whom he shows the new design.

So much for illustrations of the content of the new social program of education. Although we have taken our examples from one field of study only, — the so-called "social sciences," — it cannot be doubted that it is the real nub of the intellectual program. If space and my concrete knowledge made it possible, I would add a similar outline of the way in which the new program builds understanding of the plant and animal world of the "natural sciences." Since both are lacking, I will merely comment that the fundamental principle of the selection of the content for that and for other fields is the same as for the social sciences. The basis of selection will be objective analysis of the real world about our young people, taken with a set of values of what knowledge is of most worth.

CHAPTER XXIV · MAN AS ARTIST-IN-THE-MAKING

THERE ARE two critical problems before the American people and two great guides to their solution. The new education plays its indispensable role in each one. The first problem is to design, build, and operate a social structure that will turn our potential economy of abundance into an actuality. In the preceding chapters we have shown how in a democratic society the guide to the solution of that problem is the technologist, the social engineer. To guarantee his success the new education must not only provide him with the necessary facilities; it must also develop a tolerant appreciation of his problems and proposed programs among the people generally. To this point, therefore, we have attempted to outline the educational method by which two traits of the Modern Man will be developed — Man as co-operating democrat and Man as efficient technologist.

There remains, however, the second problem — namely, that of designing, building, and living a complete way of personal life within the social structure that is set up. The guide to the solution of that ever present problem is the creative artist. The artist is the one among us who is sensitive to the problem of building a high order of appreciation among the people. To him, then, the educator turns, as well as to the engineer, for a complete agenda of the concepts of the Modern Man. That is our concluding major task in this book.

The Ordeal of the Artist in the Machine Age

For an adequate understanding of the emergence of the modern attitude toward life and education in our Great Transition, we shall need to sketch in one more strand of the First Industrial Revolution. That is, we must outline the story of the artist in the development of American life. That story has its background in the physical conquest of the virgin continent of North America. For well-nigh three centuries, while the American was absorbed in his orgy of exploiting the earth, there was a vast dearth of either thoughtful design or quiet contemplation. Indeed, throughout most of the first three centuries of the settlement of North America aesthetic interests and appreciation among the people generally were at a low ebb. Naturally so, for men had to devote themselves largely to getting a livelihood. The pressures of a hostile physical environment made essentially for alertness and perceptual skill, and only to a limited extent for creative expression or for a subtle appreciation of the finer aspects of life. In the growing cities, as well as on the advancing frontier, the necessary nourishing intellectual and emotional climate was lacking.

The professional artist and his way of life were likewise demeaned. As a moneyed "middle class" arose and demanded its "art" symbols of power and prestige, the artist, who depended on its bounty, dared not paint or write or build with less than a superficial obviousness. Art products had to be clearly "understood," they had to be "liked"; otherwise they would not be bought. Thus through the nineteenth century there was not only a dearth of art in everyday life; in addition, the creative and appreciative arts were molded to fit the commercial standards of the day. The novelist and the poet, the playwright, the painter, the musician, all were compelled to conform to the low aesthetic standards of the exploitive society. Indeed, with the exception of a few great creative mutants, — Emerson, Whitman, Thoreau,

Sullivan, for example, — most of the potential men of art were either ignored or shunted into economic invention or technological research.

Intellectual Forerunners of Our Creative Age

A few rare personalities, however, succeeded in bringing forth foundational intellectual concepts even in the midst of the din of the age of expansion. As we have seen (in Chapter XII), between 1870 and the First World War four groups of creative minds clarified several great ideas upon which a truly modern conception of life and education can now be founded. Since I have sketched their contributions more fully in *Culture and Education in America* I shall merely tabulate here the names of conspicuous leaders and their chief ideas:

1. Scientific Laboratory Workers in the Study of Organic Life — such leading physiologists, endocrinologists, neurologists, psychologists as Walter B. Cannon, Sir Charles Sherrington, C. M. Child, Wolfgang Köhler — established with clear documentation the integration principle, the active character of meaningful response, and the nature and course of organic growth.

2. Frontier Philosophers and Psychologists, scientific adventurers with ideas, — especially Charles Peirce, William James, and John Dewey, — built a new theoretical psychology in harmony with the new scientific data. Its critical concepts were (a) we know by making appropriate active responses; (b) we know by testing consequences; (c) experience is unified, integrated, and continuous; (d) experience is essentially the interaction of individuals; (e) based on the foregoing concepts American society is to be conceived as democracy; (f) governed by these concepts education is to be conceived as growth.

3. Scientific Students of Personality — especially such social psychologists, psychoanalysts, and psychiatrists as Sigmund Freud, C. G. Jung, Alfred Adler, C. H. Cooley, and W. I. Thomas — documented the role of desires, purposes, taboos, inferiorities, and the chief self-defensive mechanisms.

4. The Scientific Students of Society — Thorstein Veblen and the other "new" economists — showed the role in economic enterprise of the profit motive, free competition, the middleman, and of corporate and

monopolistic organization and control. Franz Boas and the other "new" anthropologists, together with W. I. Thomas and the other "new" sociologists and social psychologists, developed the rich materials for the modern conception of "the culture" which I have tried to set forth earlier in this book. Charles A. Beard and the other "new" political scientists and James Harvey Robinson, Frederick J. Turner, and the other "new" historians established the economic basis of government, the role of the frontier in building American culture, the rise and decline of the old individualism, and otherwise showed the functional interrelationships of economic and political life.

Taken together these groups of scientific workers on several related frontiers of thought built up a body of dynamic concepts that described and interpreted the new industrial order that was emerging in our Great Transition, and thereby gave us a strong foundation for the new education.

The Parallel Emergence of Creative Artists in America

During the very years that these students were clarifying the intellectual basis of our new social order, a few rare artists succeeded in producing examples of creative indigenous art. With every medium of expression "great renovators of vision," as Victor Branford called them, began to paint honest creative portraits of life in the new America. There were novelists, poets and essayists, architects, painters and sculptors, playwrights, producers and actors, musicians and dancers. By 1910 an important company of creative artists had appeared and were producing original and indigenous portraits of life on every frontier of thought and emotion.

The most important thing about them was that they were truly creative. I mean by that that each artist struggled to make his product an adequate measure of himself and of his culture. Note the twofold character of the artist's problem: First, the product was an honest portrayal of his ideas or his emotions, his mood, images, or impressions — and the best he could make. In short, it was an objectification of his "self." Second, the artist

struggled to make it appropriate to the culture of which he was a part. Looking back upon it I am convinced that the ordeal of producing a creative American architecture, American dance, American theater, American writing, sculpture, music, was endured by our first true artist at the turn of the twentieth century to achieve those two purposes.

In each of the arts one or more truly creative artists emerged near the close of the Machine Age. There was Louis Sullivan, the first American architect; Isadora Duncan, the first modern dancer of the Western world; Alfred Stieglitz, internationally renowned photographer. There were Eugene O'Neill, Robert Edmond Jones, Lee Simonson, and others in the new theater; Waldo Frank, Van Wyck Brooks, Frost, Sandburg, Masters, Lindsay, Lowell, Sarett, word-recorders of the American thing; Homer, Henri, Marin, O'Keeffe, Bellows, McFee, Dove, graphic and plastic artists. These and their company were important—some, I am convinced, were great—because each in his respective medium forsook the current stereotyped modes of imported European classic patterns and created an honest portrait of the American becoming conscious of his America.

It was an astonishing achievement for lone individuals (later many of them came together and sheltered and stimulated one another) to shake off the circumscribing bonds of traditional art forms and create novel ones which were appropriate to their own images and ideas, true expressions of their own personal interpretations, and — to varying extents — conscious portraits of their America. Each was sure that the American should be painted as he saw and felt him. I know no concept of living that is more subtle than that one, and more difficult to achieve in a society in which competition and imitation are the standard ways of life.

Let us illustrate the concept and the manner in which it was achieved by reference to the work of a few conspicuous leaders.

Louis Sullivan and Creative American Architecture

Louis Sullivan built his buildings (and Isadora Duncan danced her dances, the painters painted, and the writers wrote) "as

necessity not tradition demanded." Note what that meant for each of the arts. A building, said Sullivan, must express the mood, aspirations, rhythm, and ideals of the culture, as well as be definitely appropriate to the life that was to be lived in it. It must not be made from another civilization. It must not be an imitation of any alien mode, not even English Tudor, the finest Chinese, Italian Gothic, or Greek Doric. It must be American. indigenous and truly creative. But that could be achieved only by the architect's understanding - both intellectually and emotionally — the individuals who were to live consciously in it and the group life of which they were a part. The building must be the architect's objectification of his grasp of the life to be lived in it. To state the principle is not a difficult task; to consummate it in a structure was a magnificent achievement for a lone architect fighting the feudal commercialism of our America of the nineteeneighties and nineteen-nineties.

Louis Sullivan achieved it in more than a hundred buildings. Here was a man who was both engineer and artist. As an engineer he was a disciplined student of the strength of materials, of the principles of mechanics and structural design, and he could use these relationships successfully in the erection of a sound engineering structure. But because he was also an artist Sullivan saw what most builders of his time did not see - because they were mere builders. He saw that if a structure was built merely on proper principles of engineering design, it would be very good shelter, but would not necessarily be "architecture" at all. Any nomad people can get along with mere "shelter," and a transitional civilization can do with "habitation"; but a potentially great culture can become kinetically great only by turning shelter and habitation into true "architecture." And the extent to which it has done that is a fundamental measure of the emergence of its people as a consciously creative nation. It is of the gravest importance, therefore, that we study the cultural history of our people with those three concepts as measuring sticks of its development.

As "artist," then, Sullivan knew that the form of a building, the selection of materials for it, the setting in which it was built, the decoration employed, — every aspect of it, — must be appropriate to the life to be lived in it. Carried to its proper point of expression this meant that it must also be an honest and adequate expression of the culture around it. But in the America of 1880, where architecture was a tragically dishonest thing, this was a totally novel precept, and its practice would constitute nothing short of a revolution, for Sullivan derided and condemned the widespread importation of foreign forms, styles, materials, and designs. He taught a great school of young architects, Frank Lloyd Wright in the vanguard, to feel, to see, to understand how America was in our generation to achieve true architecture. He did that by illustrating it in his hundred buildings as well as by writing it in his books.¹

So much for a mere hint of the revelation of the creative artist in America that came from the work of Louis Sullivan.

ISADORA DUNCAN - FIRST MODERN DANCER

In the other primary art, the dance, Isadora Duncan served America in a similar pioneer fashion. So far as I can see, she was utterly alone, practically without antecedents. Yet she had grasped the same creative concepts as Sullivan had done. She despised the standardization of the European nineteenth-century stage dances, particularly the modernized ballet, and their imitation in America. Paraphrasing Whitman's words, "I Hear America Singing," Isadora imagined "the mighty song that Walt heard, from the surge of the Pacific, over the plains, the Voices rising of the vast Choral of children, youths, men and women singing Democracy." As she said in her essay "I See America Dancing," she had a "vision of America dancing a dance that would be a worthy expression of America of the song Walt heard when he heard America singing."

So Isadora saw that multitudes of conscious Americans must be awakened to the creative task of inventing forms, designs, which were appropriate personal interpretations of living *in*

¹ See especially his remarkable Autobiography of an Idea.

America. Like Sullivan she clothed her vision *in* dances which broke completely with the standard imported patterns, and to the best of the ability of a creative pioneer portrayed her feeling for her self and her culture.

CREATIVE PIONEERS IN THE OTHER ARTS

I have introduced the creative revolution that blazed up in America at the very beginning of our Great Transition by a mere reference to the two great mutants, Sullivan and Duncan, because theirs were the primary arts. Architectural building and the use of the body are the basic instruments of expression. It is proper also to do so because each was a lone American in the ordeal of first achieving original expression in his medium. But about the same time, in each of the other fields of expression, a small company of comprehending persons was going through a similar torture. They too were trying to resist the conventional patterns which society understood and expected of its artists, and to put down what they really saw and felt of their American life.

In letters there was the largest company of all, so many isolated figures, indeed, that every phase of the writing craft could boast of a few. Vachel Lindsay was beginning to hymn the American Methodist culture to the accompanying time-beat of the Illinois prairies. In Chicago, Carl Sandburg was recording the rhythm of urban industrialism and the pulsation of human life on city blocks. Edgar Lee Masters, in the same Middle West, was groping his way through the drab exterior of the American small town to lay bare an even more drab interior life in his first Spoon River. Sherwood Anderson was writing Poor White and Windy McPherson's Son, and Theodore Dreiser Jennie Gerhardt. Robert Frost, Edwin Arlington Robinson, Amy Lowell, Sarah Cleghorn, and others were painting honest portraits of the declining New England Puritan culture. Lew Sarett and Mary Austin were striving to catch the inner meaning of the cultural life of the American Indian. By 1912 so many creative writing people had found their way to actual original expression that Harriet Monroe could successfully found her magazine Poetry.

Four years later Waldo Frank and James Oppenheim, with the aid of an amazing group of associates, - Van Wyck Brooks. Randolph Bourne, Louis Untermeyer, Robert Edmond Iones. Kahlil Gibran, Robert Frost, Edna Kenton, and David Mannes, — founded the Seven Arts. It was first and foremost an organ of social criticism, the first one of our Great Transition which was truly independent and free of academic traditions. Its editors, especially Frank, Brooks, and Bourne, were indeed a remarkable group of creative, imaginative painters of American life. These clear and honest students laid bare the vicious commercialism of the arts: they showed how impossible it is for great art to thrive in a profiteering, racketeering climate; they exposed the widespread mode of imitation of European and classic forms in letters. the stage, music and the dance, architecture, and the graphic and plastic arts; they laid the foundations for an original critique of the current pragmatic philosophy of James and Dewey. Fifteen vears before our contemporary pragmatists got around to discussing our changing "objects of allegiance," they revealed the disappearing loyalties of modern peoples, pointed out that ours was a society of lost individuals, stated the concepts of a new philosophy which could be built directly out of the data of American life, showed the necessity of seeing life whole, and antedated the current educational interpretation of integration.

For seventeen months this pure organ of creative art published the songs of the new poets Lowell, Frost, Sandburg, Lindsay, Kreymborg, Deutsch, Bodenheim, and Widdemer. State papers for an original American theater written by O'Neill, Jones, Simonson, Macgowan, and Company appeared in its pages. Marsden Hartley, one of the few painters who were vocal, contributed essays. John Dewey sent his philosophical articles to accompany the writings of the Europeans — Bertrand Russell and Romain Rolland — and of the young American social critics — Brooks, Bourne, and Frank.

In the meantime creative centers in the graphic and plastic arts had sprung up at various nature-favored places — Wood-

¹ See Dewey's Individualism, Old and New.

stock (New York), Provincetown and Nantucket (Massachusetts) — and in the studios of New York, Philadelphia, Boston, Chicago, and other metropolises.

But the greatest focusing center of all, Alfred Stieglitz and his three "American Places," had begun its vitalizing and integrating work, a work which has continued to the present day. Although only the current one, located since 1930 at 509 Madison Avenue in New York City, has been called "An American Place," the other two - 201 Fifth Avenue (1005) and 303 in the Anderson Galleries (1920) — deserved the same recognition, perhaps "291" most of all. To most Americans who have heard of Stieglitz these "Places" are perhaps merely "little galleries," where the man, who at the age of thirty-five was America's greatest creative photographer, has shown examples of "modern" painting. Yes, they were that and are today, for in them Stieglitz, earliest among American gallery men, first showed Cézanne, Matisse, Picasso, et al. to jeering skeptical American art-buyers. But Stieglitz and his centers have been far more than that. They were true "American Places," fertile breeding ground for creative Americanism. Here it was that after first opening American minds and spirits to the significance — for Europe — of the original European thing, he devoted himself exclusively to prodding young Americans to paint, model, write, dramatize, dance the American thing. So it was that his "Places" gathered and nourished a remarkable company of workers who today are among America's greatest creative spirits. Not only the painters — Georgia O'Keeffe, John Marin, Abraham Walkowitz, Arthur Dove, Max Weber, and Marsden Hartley - but Waldo Frank, Paul Rosenfeld, Lewis Mumford, William Carlos Williams, Dorothy Norman, and others in letters and other fields.

I speak emphatically of Alfred Stieglitz because of his unique leadership in the stimulation of truly creative Americanism in the arts. There is no one like him in our America, and his influence as well as his reputation will continue with us long after he has physically gone from our midst.

These original people, then, were typical of Branford's "great renovators of vision," who, at the threshold of the Great Transi-

tion, created new American materials for a fine art of living. By 1910 they had begun to produce indigenous examples of art on every frontier of thought and emotion. For a quarter-century that stream of creative production augmented, and today a considerable body of Americans are becoming conscious both of the cultural need and of the avenue by which it can be satisfied.

We can be confident, therefore, that, as America advances through her critical transition period, she does not lack for sensitive artists. With every medium of possible expression they are becoming articulate. Our times constitute not only a period of critical *need* for art, but also one in which the artist-leader is already beginning to communicate his outlook and his ideas to a somewhat larger sector of the population.

Low Ebb of Aesthetic Interests in America Today

Nevertheless, although the outlook, ideas, and ways of work of these creative leaders have begun to spread among the people. even today they have not got into the understanding or behavior of more than a small fraction of them. It is true, of course, that in the past decade standards of "taste" in dress, domestic architecture, household decoration, and other phases of everyday living have been markedly improved by the employment of the "commercial artist" in business. As a consequence increasing numbers of our people tend today to surround themselves with aesthetically "better" things than they did in Victorian America. But the point must be stressed that they do this, not so much because they personally appreciate and deeply desire these "better" things rather than others, but because these new forms or "styles" are the ones offered to them by our mass-production business enterprise. They do not intelligently choose them because they have really "experienced" them personally.

Appreciation Is a Dynamic Matter

The significance of these statements for the educator is clear. The level of true appreciation cannot be raised among the people generally merely by surrounding them with aesthetically better things that other people have made. Appreciation is a dynamic personal matter. It is built only by participation in activities of creative expression and appreciative awareness. In order that the living of the American people may be permeated with a high order of creativeness and appreciation, a total generation of Americans must be educated in the practice of these. The problem now is to spread the creative point of view among the people generally, and the chief agency to do that is the public-school system.

Lag of Provision for Creative Expression and Appreciative Awareness in the School Curriculum

For these reasons the century-long dearth of art and aesthetic activity in the school program is a matter of tragic importance. I have already commented on the fact that throughout the nineteenth century the graded-school curriculum, like the community life which produced it, almost totally ignored its obligation to develop creativeness and appreciation among the general student population. As we have established in preceding chapters, both curriculum and procedure were under the sway of a regimented, disciplinary conception of life and education. Youth were taught to conform, to adopt standard conventions, to memorize a definitely fixed body of facts and principles, not to originate new ideas, nor to make, speak, write, sing, or otherwise portray what they saw and felt and believed. This was true of every department of the curriculum, including those more conventionally thought of as "the arts."

The Artist-teacher Enters the School

Fortunately for contemporary educational reconstruction. however, an increasing company of artist-teachers has crossed the thresholds of the child-centered schools during the past two decades. And from those schools the attitude of the creative artist is already radiating outward at unexpected rates. I deliberately name these workers "artist-teachers," not merely because in the commonly accepted sense of the term they are good craftsmen, but especially because they exhibit two unique and indispensable traits. First, they are sensitive to the "art" attitude and its expression in life; second, they are masters of the effective development of this attitude in other people. They are artists and teachers. They sense art and they sense the growth of art in people. They are living embodiments of the spirit and procedure of Everyman-as-Artist as well as of Everyman-as-Teacher. In their laboratory schools they have conducted research and experiments which are already building a new understanding of the role of "art and the aesthetic" in life and education.

It is of crucial importance, therefore, that teachers generally become students of art and art education as well as of our economic and political society. No teacher and hence no curriculum-maker can build an adequate program of life and education if he ignores the materials of the artist.

Here, then, is a theme for a whole library of discussion — the role of art and the artist in American life and education. It is a theme to which I will devote much of the material in my studies in the psychology of American culture. In bringing this present study of American life and the curriculum to a close, therefore, I will state the major problems and important hypotheses that seem to me now to have much documentary backing.

"Only with the Attitude of the Artist"

At the outset we must state an important caution. That is that the problems of art and art education must be approached with the attitude of the artist. We must strive to answer such questions as "What is art?" "What are the elements of the creative act?" "How is growth in the creative act measured?" And we must answer them as the creative artist would. Perhaps the reader will feel that this statement implies that the problems of art are approached with an orientation different from the orientations adopted in other fields of work. That is exactly the point. The artist, like the engineer, the mathematician, the business executive, responds to most situations of life as other normal people do. But the creative act, the nub of the artist's work, has special characteristics which must be understood if they are to be intelligently discussed. If I should ask a group of mathematicians to discuss certain mathematical problems with me, they would require of me a personally grounded knowledge of the data, principles, and relationships which are necessary to discuss such special problems. They would lay down the criterion that we should approach the problem as mathematicians do; otherwise our minds could never meet, let alone interpenetrate. Similarly, in considering problems of medical research, engineering design, what not, each would be approached with the attitudes appropriate to the outlook in that field.

Moreover, the dictum that we approach problems of art with the attitude of the creative artist is based upon the accepted psychological principle that one "knows" a situation only "internally, in its own terms"—to use Dewey's retort to Frank et al., when referring to their criticism of the validity of the pragmatic philosophy. "Internally"—that is, one must have experienced art to know it. One must have engaged in the creative act really to understand it. One really understands a meaning, as we have established in an earlier chapter, only when he has responded with it organismically.

Teachers, then, can get the artist's attitude only by contact

with artists. They can understand (that is, feel, grasp, sense) the creative act only by creating. Hence both "in service" and before entering service their education must make constant provision for personal contacts with artists at work and for creating original statements of their own in some medium.

Some Commonly Accepted Generalizations

As a result of more than two decades of experimentation and discussion in the child-centered schools, in the studio forums of creative artists, in the meetings of the Progressive Education Association and other dynamic educational organizations (ves and even among academic disputants in the colleges!), some of the traditional confusion and misunderstanding concerning art and art education is being dissolved. Slowly a body of common meanings is being agreed upon with which to clarify the complex problem of building a high order of creative ability and aesthetic awareness among our people. To clear the ground for a discussion of the more essential problem of the creative act, and for economy of space in a book which has already overstepped its allotted boundaries, I shall merely state, without supporting evidence or argument, five generalizations which seem to me not to be subject to debate. They constitute firm ground upon which our educational procedure can be built.

First, creative expression can take place through many media—sound, words, gesture, movement, social relationships, any medium. It is not to be thought of as the unique activity of professional artists—painters, sculptors, poets, novelists, musicians, and the like.

Second, every human being has within himself some potential ability to create and appreciate aesthetically. These traits follow the law of distribution of human capacities that has been well established for anthropometrical and mental traits. Hence the maximum development of Everyman-as-Artist is coming to be regarded as one of the indispensable objectives of general education.

Third, but there are vast differences among the people in

potential "creative" capacity or in sensitivity in appreciation. Any population reveals a few persons of genius, a larger number of considerable talent, a great mass of mediocre capacity, and a few persons of practically no capacity. But nearly all have some potential.

Fourth, "artists" are not conceived to be specialized persons set off from the rest of society. On the contrary, the subject of our educational discussions must be Everyman behaving as artist. Apparently some students of education—notably Mr. John Dewey, who devotes several chapters of his recent book Art as Experience to demolishing the popular notion—still regard the matter as subject to controversy. That seems to me to be a waste of valuable philosophic energy. The whole theme of my present book assumes that we are considering the education of Everyman.

Fifth, in view of the stress laid here on "the individual" as the center of educational attention, it is important to state that all that is said assumes the current common stock of ideas concerning the interaction of the individual and the culture; especially that life for practically all people is a constant interaction between individuals in changing social groups. "Psychology," therefore, is essentially, although not completely, "social psychology." This concept was carefully built up in Chapter XVI.

What, Then, Is the Essence of the Creative Act and Hence of "Art"?

For ten years I have tried to get "the artist's" answer to that question. I have discussed it for hours without end with painters, novelists, poets, essayists, creative craftsmen—builders of houses, architects, gardeners, sculptors, persons who have made conspicuous successes of the art of living. Further categories need not be listed. I have read "the books" and studied the products of the artists and their processes while at work.

What, then, is the essence of the art experience? I think the

simplest and at the same time most adequate way to answer this is to say that it is the *objectification of the self*. Everyman, working as creative artist, strives to put down, to make, to do with "materials" what he sees, feels, and thinks, in his unique way. This criterion of the honest objectification of my self is the indispensable concept of any valid personal philosophy. I repeat what I said in an earlier published source 1:

[Everyman-as-Artist] constantly strives to speak, to write, to make, to live, what he feels and thinks, in short, what he is, at a given moment. This is the measure of a sound personal philosophy of living. Note the dogged determination of the man, the actor, the painter, the composer of music, the writer of words, the dancer, the carver in wood, the chiseler in marble, the architect of a house, the statesman of a nation, the goodly judge of a court, the philosopher of a society, to objectify what he feels...

The concept of integrity is, therefore, the very essence of a sound personal philosophy of life. Belief in the rightness of oneself is the true basis. Confident superiority rather than uncertain inferiority is the criterion. Between the Man-as-Artist's opinions and his life there will be no gap. No gulf will yawn between his reading, his observations, and his attitudes toward persons, problems, and institutions. There will be no lacuna between his theory and his behavior. Defense mechanisms will be reduced to a minimum. Hyprocrisy will not exist in human behavior.

The Indispensable Elements of the Creative Process

This concept of objectification of self as the nub of art and the creative process can be further clarified by noting carefully the elements of the process. Again I merely outline the product of hundreds of hours of observation, conference, and writing on the problem.

The creative process seems to me to be reducible to three major phases:

¹ Culture and Education in America, pp. 231-232.

FIRST, CLARIFICATION

A determined effort to perceive (that is, to see, hear, feel, what not) clearly. "Seeing," then, means, as I illustrated in Chapter XVIII, a grasp of significant relationships, not docile adoption of insistent familiar ones. It means getting hold of subtle meanings hidden from casual, superficial observation. To achieve it, however, Man-as-Artist must give himself to the task of prolonged concentration, of observing, scrutinizing, weighing — waiting until the surface characteristics give way to inner relationships. The thinker describes the ordeal as one of "thinking it through," seeing all the possible permutations of ideas. The painter puts it, "Looking until it burns into my head."

First and foremost, then, in the education of Man-as-Artist, provide constant experience in clarifying ideas, impressions, moods, generalizations, and points of view.

To Educate People to Be Clear, Rather than to Be "Right," Should Be Our Ruling Objective

SECOND, OBJECTIFICATION OF THINGS SEEN

Making, putting down, with some medium, what one sees is the second crucial step. This is the problem that makes or breaks Man-as-Artist — and the educational program set up to develop him! Can he say what he thinks? Can he translate his ideas into an adequate statement of content and form of words? Can he state with line, modeling, color, what he perceives in his unique way? Is his statement really as adequate a portrayal as he can make, or has he been content with a first, offhand, superficial one?

These are devastating criteria upon which to measure Everychild-as-Artist, but we must employ them if his education is successfully to build him into Everyman-as-Artist.

To achieve that requires that education must succeed in doing two things. First, it must develop clear powers of perception, as already stated. Second, it must guarantee technical mastery of materials and processes. *Technical competence is a desideratum*. Man-as-Artist must know, by having experienced, what effects different arrangements of words, sounds, gestures, movements, colors, will produce when put down, what fusion of his materials will bring about certain appearances in the product. There is no way to know this vicariously. The school program must provide a vast amount of education in technical practice.

We hasten to remind ourselves, however, of the conclusion drawn in earlier chapters — namely, that the acquiring of "techniques" must not precede the demands of creative production. "Teach the techniques" comes as a unison of affirmation from the artist-teachers in the child-centered schools "only when children consciously recognize *their* need for them." Once that recognition emerges in the child's demand for aid in expression, then do not hesitate to "teach" technique.

The Role of "Communication" in Art. At this point I pause to make a passing comment on a controversial matter. In this process of putting down what the artist perceives, to what extent is he governed by the desire to communicate his ideas, feelings, moods, points of view to others? What part does social understanding, approval, and disapproval play? In academic quarters just now the discussion of this question has reached an impasse. Some representatives of the "experimentalist" school of intellectual philosophy insist that it plays a major and guiding role. The "Communists" and others who conceive of art only in terms of propaganda and social reconstruction do also.

Although I shall not argue the point in detail in this place, I shall remind the reader that the creative artist who subscribes to the generalizations stated thus far in this book cannot possibly agree to that position. It definitely conflicts with the principle of clear and adequate objectification of self. Indeed, the point must be pushed to its further necessary conclusion: To be guided by the necessity of making some "public" understand will, on many occasions, destroy the possibility of honest and adequate objectification of self. What someone else thinks or feels about his statement (that is, his poem, painting, book, house, what not) must not be permitted to turn Man-as-Artist aside from putting down what he sees in his unique way.

I hasten to repeat the statements made earlier that the artist, of course, is constantly conditioned by the culture in which he lives, and no doubt he is affected, constructively and destructively, by social approval or disapproval (in our kind of social world the din of it is in the ears of any artist most of the time!). But his primary concern is to clarify his own grasp of life and to set it out in some kind of objectification. To the extent that the desire for, and the difficulties of, social communication complicate that process, Man-as-Artist must deny the desire and the demands of the public.

THIRD, DOGGED SELF-CRITICISM

A "divine discontent" with his product marks Man-as-Artist. He knows that, try as he will, most of his struggle to "say" what he "sees" will be partially abortive. Hence he schools himself to reconstruct his work continuously in the attempt to make the product a replica of his vision. Back and forth he goes from vision to objective statement, constantly reanalyzing, struggling to see more clearly, discovering new relationships, and striving to make the form of his objective product more closely approximate the new thing seen. Thus his temper is one of rigorous self-discipline, and it is revealed in his determination to "think to the bottom" and in his unwillingness to "exhibit."

A Nation of People Who Are Aware: a Note on the Building of Appreciation

Our educational aim in the arts is not, of course, to develop a race of professional artists, although the new education will undoubtedly contribute to that. On the contrary, our purpose is to build a nation of truly Modern Men, fit to live in a Modern World. It should be clear that one route to the achievement of this goal is the kind of "art" education that the artist-teachers of the new schools are building.

A nation of people who are aware — that is the goal we set our-

selves! Socially aware...Democratically aware...Technologically aware...Personally aware...Creatively aware...

Aesthetically aware. In short, a nation of Modern Men — the goal of our new education.

On the side of aesthetic awareness we are confronted by the agelong question How is appreciation to be built among the people generally? As we said earlier, appreciation is a dynamic matter. It will not be developed merely by surrounding the people with examples of "good taste," although that will help somewhat.

There are many varieties of experience which can be utilized in the building of sensitive appreciation, but two are indispensable to its maximum fulfillment. The first attitude to be consciously. systematically encouraged by the school is that of receptive awareness. This is a willingness to throw off traditional conformities to conventional rules, forms, and formulas and to receive whatever the situation has to give us. We must rid ourselves of our fears and our reticences. We must consciously strive to become aware, sensitive to the possibility that the "situation" observed may properly have very different elements and arrangements from those to which we are accustomed. For example, the product may not "look like" the superficial exteriors of the things it portrays (witness modern painting since Cézanne); it may not sound like things generally heard (witness modern music); words may have been assembled in totally novel arrangements (witness the writing of Joyce, Cummings, Stein). Man-as-Artist must, then, be practiced in building an "intimate-receiving self" which will be characterized by honest receptive attitudes. This is the first desideratum of appreciation-building in American education.

The second is equally indispensable for maximum results—active and frequent participation in creative expression. "I know only to the extent that I have creatively experienced." Let us say it again and again. Only by actually passing through our bodies and minds the processes of "the art" can we become maximally, appreciatively aware of those processes. Since this factor has already been dwelt on at such length, I shall say nothing further about it.

Other factors contribute to the heightening of appreciation, although not to such an extent as do the foregoing. Merely to name two important supplementary procedures: first, systematic, dynamic education in listening and observation; second, the intelligent, analytic study of art forms. Both are needed. Definite practice can be given children and youth in a graduated scheme of education which will eventuate in understanding, discrimination, and real appreciation. Such provision must not be overlooked. Intellectual analysis also of line and color relationships, of musical themes, of bodily gesture and movement, makes an important addition to our richness of understanding and appreciation. It too will be employed. But, I remind the reader once more, the essential educative gains in "observation" and analysis are subsumed in the adequate development of the creative process itself.

So much for a digest of a contemporary theory of the creative and appreciative acts and their development. Since this is only a chapter and not a book on art education, I cannot illustrate from a half-dozen media of expression, as I should like to do, how these desiderata of art education are put into practice. Such a statement will be forthcoming at a later date. In the meantime may I refer the reader to the annotated bibliography in the Appendix, "What to Read," and to my more complete printed discussions, first, in *The Child-Centered School* (Chaps. X–XIX) and, second, in *Culture and Education in America*.

The Art Experience an Indispensable Vehicle for Social Integration

Finally our discussion of art and art education has far-reaching implications for social reconstruction, which is one of the major themes of this book. We have shown that economic and political life in America, like that in many other parts of the Western world, is moving toward ever greater socialization. There is, therefore, no more important theoretical problem before our people

than that of how to further that trend. The combined resources of the social philosophers and social engineers and the artists will be necessary to provide us with the concepts and attitudes to guide the building of an adequate program and strategy of reconstruction. The possible contributions of the former two groups have already been stated. What can the artists contribute?

We return to the dictum that the artist, broadly interpreted, is the true leader in the reconstruction of personal outlooks and ways of living in the new society. That society is visualized as the interaction of two or more dynamic selves. Each one is socially constituted, but each is a unique self. As the criterion of excellence for each individual self is its adequate objectification, so the criterion for the sound society is the development of a multitude of sound selves. We need a theory which will embrace the co-ordinate concepts "the social" and "the individual." "The social" is nothing more than the interpenetrating responses of individuals living in changing groups. Our goal is a sound society, but we can produce it only by producing sound individuals. Neither one is antecedent to the other; both develop together.

But, as interpreted here, it is the art experience, the creative act, that contains within itself the psychological power to develop the sound individual and hence the sound society. That power is the concept and attitude of Man-as-Artist's integrity as set forth in the constant attempt to objectify himself — to speak, to write, to make, to do only what he thinks and feels, only what he is.

A society of the highest order of social good can be built on that criterion. It will approximate social purity; it will be relatively free from a hypocrisy which is dictated by self-defense. Instead of each individual's trying to defeat each other one (as in our current regime of competition), each will strive only to be his best self. Correspondingly, because of mutual respect, differences among individuals will be settled by honest, frank social adjustment. The current widespread order of hypocritical antisocial competition can then give way to true social co-operation.

I can only conclude, then, that the creative art experience, because of its integrity-producing power, is an indispensable vehicle for social integration.

CHAPTER XXV · THREE CURVES OF SOCIAL TREND; THE EDUCATOR AND SOCIAL RECONSTRUCTION

THE TIME has come to lower the curtain on our prologue to the drama of American life and education. A prologue raises the curtain on a dramatic scene, reveals the stage-set, and introduces the characters. That was the task we set ourselves at the beginning of this book, a task that has required the whole book for its completion. A heterogeneous cast has spoken its lines in many scenes, but three leading characters have had the center of the stage.

First, American industrial society, becoming increasingly an urban and cosmopolitan population, successful in building a powerful system of physical production, but failing to set up more than a pitifully inadequate distribution of purchasing power.

Second, democratic government, young and immature, momentarily dazed and uncertain, successful in equipping the people with constitutional guaranties of civil and political liberty and with the machinery of the suffrage, but failing to build the means of effective democratic participation and decision-making among any considerable number of them.

Third, a democratic educational structure, implementing the idea of the ladder of equal opportunity but formal and disciplinary in content and organization, successful already in building literacy among the people but still aloof from the community life that made it and failing as yet to develop real, popular consent based on social understanding.

Around these three leading characters the colorful drama of American life has unfolded. The first part, described in Book I. revealed the striking achievements and deficiencies of the Machine Age. The achievements were telescoped into one concept. the efficient productivity of man. For the first time in a million years on earth man, aided by his new power-driven machines, has potential capacity to produce enough physical goods for a high standard of life. The scenes of Book I not only documented the fact of productivity; they also showed the perfect functioning of the factors that collaborated in the world's most spectacular orgy of exploitation: virgin continents and favorable geographies . . . the fruition of centuries of scientific study applied to economic invention . . . men left free by government, in fact controlling government, to exploit things or people at will — to name only the conspicuous ones. Only one outcome could have been expected from that virile century of construction; that was the setting up, for the first time in the history of man on earth. of a truly efficient system for producing physical things.

But we saw that the swift success of our fathers in producing goods also bequeathed grave problems to those of us whose fortune it was to come to maturity in the first quarter of the twentieth century. These all center around our inability to distribute the magnificent potential standard of life to the people generally. Of the many contributing factors I name two: first, the resources which throughout the nineteenth century had guaranteed opportunity for the exercise of initiative and had always taken up the slack of initial exploitation, and which steadily disappeared after the turn into the twentieth. I refer to such things as free land, increasing numbers of people, the initial building of vast public utilities, the development of new industries, and the open market for economic invention. Second, the lag in social invention and popular consent.

The necessary result of all this was the increasing economic chaos after the World War and the bewilderment of bankers, industrialists, and politicians, whose only stock in trade were such formulas as "Buy low and sell high" . . . "Restrict production and stimulate buying at high prices, thus reviving the

willingness to produce." And we have been witnesses to the most important result of all — the emergence of a "depression" so vast and so deep that we are now rudely awakened to recognize our times as a Great Transition between two stages of industrial-democratic culture.

Three Curves of Social Trend: Signposts of Social Reconstruction

To center attention upon the very crux of our social impasse I return to the epitome of our times that I put on the inscription page of this volume. The interrelationships between three deeprunning social trends point to the factors that produced our contemporary chaos and to steps which we must take to get rid of it.

The trend of economic productivity
The trend of social invention
The trend of popular consent

I now submit the hypothesis that, in this Great Transition, our high-powered interdependent system of industry, agriculture, business, and government can continue to be operated under the democratic method only when these three trends keep pace with one another. Social invention and popular consent must keep up with economic invention and organization; we have seen the manner in which they have got completely out of step with one another.

FIRST, THE ECONOMIC PRODUCTIVITY OF MAN

Even the curves which describe the recent growth of economic enterprise itself show great divergence in exponents! While economic production on the whole advanced throughout nearly a hundred years "as the cube of the time" (yes, and as its sixth, eighth, and tenth power too!), free land entirely disappeared and the free market nearly so. Population lagged far behind, advancing to 1918 only "as the square of the time," and after

that date it fell off rapidly to little more than a horizontal plateau. But meanwhile the productivity of a worker (witness Bassett Jones's man-hour equations!) has risen "as the fourth power of the time"! This divergence in the curves that describe the building of the productive system is, in itself, a sufficient warning to trained technicians of the need for critical reappraisal of the whole social system.

But whether or not the educational workers of America comprehend the warning in these technical appraisals of our times, they certainly can grasp the dramatic challenge to education embraced in the three curves of social trend to which I refer.

The curves describing the quantity of goods that a man can now produce are mounting at such an accelerated rate that, in the judgment of competent engineers, within a fairly small number of years we shall witness the production of quantity, or standardized, goods relatively without the interposition of men. Note carefully that this prediction refers to the mechanical production of quantity goods — goods that can be fabricated in mammoth lots by continuous straight-line factory processes. It has no reference to the vast amount of craft goods and services that can be produced only by the personal and creative effort of human beings. Moreover, let us recall a single crucial hypothesis from the study of productivity and purchasing power namely, that in the quantity production of goods there is no longer any discernible relation between what a man can produce and the share of the social income that society can pay him for producing it.

SECOND, THE TREND OF SOCIAL INVENTION

I personally draw the conclusion that when such a point arrives in the trend of economic affairs, government, that is, the people as a whole, must step in and take charge, working out a solution that will bring the greatest good to the greatest num-

¹ See Mr. Jones's already famous documentation, *Debt and Production* (The John Day Company, New York, 1933).

ber of people. But that means the invention of creative methods of social control through government. Hence the economic trends are inextricably interrelated with the political trends; and when one lags out of step behind the other, dangerous strains are set up in the social order. It is precisely that that has now taken place in the regulation of the collective affairs of men.

In simple self-sufficient societies this is of little import. But we are now beginning to suspect that in a high-powered interdependent society the uninterrupted production and distribution of goods and services cannot continue without the definite control of government. If we have forgotten the evidence for this hypothesis, we need merely to recall the twelve million to fifteen million people out of work in the seventh year of our so-called depression and such makeshift remedies of the New Deal since 1933 as a large-scale "relief" program . . . a giant plan of made work . . . the vast expansion of public services . . . attempts at the setting of minimum purchasing power and hours of work . . . critical forms of social insurance . . . control over speculation . . . and the building of a mechanism for financing the whole enterprise.

To focus our thought sharply on the dangerous breaking apart of these economic and political trends I have spoken of the significance of the shape of the curve of social invention and hence of control over the economic system. "Curve" is used here as a dramatic measure, not as a quantitatively derived one. Actually, of course, we have no quantitative measures of the trend of creative intelligence in handling these difficult problems of social control. In a rough kind of way one could plot the number and quality of men who understood the political problems that mounted as the decades of the mechanical conquest of America passed. Certainly at the middle of the century they could be counted on the fingers of a few hands, and a plot of the total body of intelligence could hardly be discerned above the base line of the curve. As the years of expansion (1870-1900) passed, increasing numbers of creative students of the new culture of industrialism found themselves in each of the new countries, although most of our creative potential continued to be shunted into economic technology.

But as the years of our Great Transition advanced, as historical perspective became longer and better documented, and as the symptoms of stalling of the system became more obvious. the number of students who understood the factors and trends steadily increased. Their corporal's guard of 1800-1000 became a considerable company by the World War and a war-strength regiment by the advent of the second Roosevelt in the White House. Modern agencies of communication — notably the magazine and book press, the radio, the public forum, the college and school curriculum, and even the content of textbooks - all contributed to stretch the radius of political understanding among students and leaders. In the form of stereotypes it reached some of the political leaders and has recently been given widespread circulation. Certainly one thing has happened: the curve of creative social control as measured by the number of students who understand at least the rudiments of the new problems of government is now rising rapidly. It cannot be doubted that the years since 1030 constitute the beginning of the most creative period of social analysis in our entire history. Whether the bulk of creative understanding can increase rapidly enough to establish equilibrium with the curve of economic productivity remains as a crucial unanswered question of our time.

THIRD, THE TREND OF POPULAR CONSENT

But there still remains the problem of the lag of the curve of popular consent! From the Foreword at the beginning of this volume to this concluding chapter, my book has been built around the theme of social reconstruction by means of the democratic method. It is now a truism that, under this method, government will endure only when it is based upon the consent of the governed. But, we remind ourselves, when is consent given? First, when the people have constitutional guaranties of civil and political liberty. Second, when they have the machinery for registering collective judgments at the polls, that is,

popular suffrage. Third, when they have the machinery for the adequate assembling and digesting of the facts of their social issues and problems and for public discussion of them. Fourth, when they have sufficient understanding of their collective affairs to give intelligent approval or disapproval to the acts of their representatives in office, and sufficient initiative to continue them in or recall them from those offices. Only when these desiderata are satisfied have the people given consent.

As a result of the seven-hundred-year-long struggle of the middle class for participation in government, the first two principles of consent have been established in Great Britain, the United States, and certain other democratic countries. Constitutional guaranties and the machinery of the suffrage are matters of fact. But the curve of popular understanding, the crux of consent, has lagged far behind economic enterprise. It was to prevent that that our fathers set up universal elementary education and that we are now extending it upward to include the secondary level. But in the first century of building they could do no more than set up the physical structure, establish the principle of free education, and gather into it all the children of all the people. As I have shown, the physical task has been well done, and literacy, an important vehicle of understanding, has been given to 90-odd per cent of the people.

But the great task of building understanding in at least a vast minority of the people has hardly been attacked, and that is the chief problem of social education in our times.

This, then, is a brief final comment on the nature of these three social trends. We know now that to guarantee the safety of our industrial-democratic culture these must move on in closely locked interdependence. But we know also that they are now following widely divergent equations and that, while economic productiveness is advancing more swiftly than ever and social invention gathers increasing power, popular consent has not yet been jolted out of its ignorant inertia.

How can the interdependent relation between them be established? Only by a mammoth program of education — of adults,

of youths, of children. And so finally we come back to the nub of the problem with which we began our study — the Teacher.

How Shall the Teacher Approach the Problems of Social Reconstruction?

I will not take the space of several pages in this final chapter to show from documentary studies the vast blind spots in the vision of most American teachers in dealing with this problem. A whole library of research and investigation is available to those who wish to do so. I will on the contrary use my pages to deal directly with the problem of the educator's orientation and approach.

How shall the American teacher, caught in the Great Transition, approach these problems of social reconstruction? With what point of view and method of work shall he build his curriculum and lead his young people in the search for an understanding of American life? It cannot be doubted that every teacher who honestly and courageously helps to build a generation of informed young Americans must take a position on the critical questions before us. Each of us must decide now where he stands; in fact, each of us will decide where he stands, whether he does it consciously or not. Let us not forget for a single moment that drift, inertia, or any other form of refusal to make a decision is in itself decision-making. Every person who does nothing, merely drifting with the social tide, has definitely taken a position in defense of things as they are. He has accepted, acquiesced, even though he has not given external lip service to his conformity. It would be far better, "for his own soul" at least, for him deliberately to make his decision for himself.

So every dynamic teacher in America should now confront such questions as

First, are our times a period of Great Transition, or are they merely another trough on a century-long time-line of periods of "prosperity" and "depression"? Are we moving swiftly into a new epoch in modern social history, or are we not? The answer which we give to that question will orient our position on all the others and align us with one or another social group. We are all now compelled to take a position on that great question.

Second, each of us must inform himself as to whether we can rely on the continuation of such conditions as (1) free land, (2) more people, (3) new industries, (4) speculation, to take up the slack caused by accelerating technological efficiency.

Third, can the problems of production and distribution, population, democratic government, and personal living be thought about and solved with the ideas, concepts, and attitudes used in the era of expansion that has just passed? Can we leave the plotting of the curves of social trend to the doctrine of laissez faire, free competition in an open market, whether the wares be economic in character or whether they be such precious psychological possessions as human abilities, opportunity to live a life of security and beauty, or freedom from inferiorities and conformity? Or must we submit ourselves to a vast amount of social control, hitherto undreamed of and produced by creative effort and consciously planned design? You and I must now take a position on that issue.

We need not multiply cases; the questions asked above will serve to remind us sufficiently of what the issues are.

Protagonists or Students?

By what method, then, shall we arrive at a position on these current issues? There are only two alternatives: the way of the protagonist or the way of the student. Choice must be made between these; there is no middle ground.

Will you be evangelist or thinker?
Antagonist or constructive critic?
Song-singer or vigorous questioner?
Will you chant hymns of faith or participate in the open forum?

Phrase the dichotomy as you prefer, the imperative alternative confronts you: in the critical period ahead will you be protagonist or student?

I. THREE BRIGADES OF PROTAGONISTS

If you should choose to solve your problem in the easy manner of conversion and partisan affiliation, there are three different companies of citizens which you can join.

First, the Reactionary Defenders of Things-as-They-Are. These are the out-and-out protagonists of the status quo. They are either the owners of monopoly or those who stand with them, aspiring to the same state themselves. These wish to keep what they have, to preserve their present security, and to add to their accumulation of things and power. They deny that the current period is a crisis in the affairs of the Western world. Either they are indifferent to the facts of social trend, or they deliberately ignore them. Most of them refuse to study the problem at all, closing their minds to the factors that have precipitated the current issues. They believe that if we sit tight and have confidence, things will right themselves. The opponents of this group call them "reactionaries." The extremists among them can rightly be called Fascists. They falsely claim to be the only true Americans: for while mouthing the words of liberty and democracy, they would stamp on freedom of discussion and impose dictatorship.

It is clear that they are protagonists — protagonists of thingsas-they-are, willfully blind to the facts and needs of our times.

Second, Advocates of Revolution. At the extreme Left of the scale of social loyalties are those who would tear down our whole way of life, impose a dictatorship of a different part of the population over the other parts, and run things very differently. These have come to be known by various labels — such as socialist or communist, stereotypes which, while energizing their allegiance to their party, hamper their study of the total social problem; stereotypes, unfortunately, which set those labeled off from other groups as social enemies to be feared and fought and not as fitting collaborators in the economic-political forum.

A few among them, including some of their leaders, are students — of a kind. But they tend to be students of historic pronouncements, of famous theories, such as those of Karl Marx, rather than realistic students of our own current economic social trends. The bulk of their followers are as incompetent in the open forum as are the reactionaries of the extreme Right. Lacking ownership and control and suffering economic privation, most of them are hurt people who have taken sides in what they have accepted as a struggle to the death between two mutually exclusive and antagonistic classes, — owners and workers, — into which they assert that the American people are now irreconcilably divided. Like the Fascists of the Right they are contemptuous of democracy and would have government dictate the control and operation of most of our collective and personal affairs.

Thus, all but an infinitesimal minority of these Leftist devotees of social overturn, like the reactionaries of the Right, are

protagonists - not students.

Third, Various Middle-of-the-Road Groups. Between these extreme groups on the scale of economic-political allegiance are the bulk of the American people. Divided into a confused maze of overlapping interest groups, they reflect in divers ways differing interpretations of what they regard as the American way.

The leaders of these groups are, in the main, the evangelical protagonists of social remedies: two-hundred-dollars-a-month old-age pensions and other "share-the-wealth" devices, spreading-the-work, insurance, higher inheritance and income taxes, better wages, somewhat shorter hours, cleaner factories and cities, guaranties of collective bargaining, control of speculation, protection of bank deposits, and the like. Thus they are "progressives"... "liberals"... who would correct certain obvious evils of the social system. But they urge these tinkering makeshifts in a mental framework of complete acceptance of Western capitalism. They believe in the essential soundness of the traditional Euro-American system of private ownership of productive property and of its operation by competition in the open market. While sincerely regretting that some members of the community are pinched in the recurring chills and fevers of

the economic cycle, they still assert that the system is right and that rather than change it the people must be prepared to adjust to it when it stalls a bit from time to time. They are willing to tinker with the going mechanism but not to inquire into the possible need for rebuilding it or for making a new one.

The rank-and-file of our people — many tens of millions in number — constitute the membership of these groups. They coalesce momentarily around those leaders who promise them a better living than they now have. They are appealed to by the dramatic assertion of familiar American stereotypes: security, opportunity for the individual to get ahead, don't kick over the traces, help your neighbor, and the other traits stated in Chapter V. They are puzzled, ignorant and bewildered, uncertain of problems, factors, or solutions, and governed completely by wishful thinking. The attitude of millions of them who are on relief is marked by a deep humility and a faith that times will get better, jobs will return. They fear the "red agitators" of the Left who "organize strikes," and they refuse to condemn owners of monopoly production, saying plaintively, "It's my own fault."

In spite of their troubles they do not want the system changed, because down deep they are luck-hunters, believing that fate will smile their way sooner or later and that, under what they assume to be the vagaries of *laissez faire*, it will some day be their turn to rise above their fellows into more favored positions. The men on the bread lines of 1933 said it to us in so many words! Their only condemnations were of their own inability to be better Americans; if they had been real successes, they said, they would not be in the bread lines!

These, then, are the protagonists — the ninety-and-nine of the American people. Most of them are well-intentioned, kindly, honest as human beings go, craving order and security, a better living, more social approval, greater community prestige. Although they are the literate possessors of an eighth-grade to twelfth-grade education (their leaders and the conspicuous owners count their years of schooling from twelve to twenty!), and

although they are also the possessors of constitutional guaranties of civil and political liberty and of the mechanism of the suffrage, the preponderance of them have never really understood their collective problems or the alternative courses of action before them.

It is for that reason, and that reason alone, that even to the present day government by consent of the governed, although a hard-worked shibboleth of all the leading protagonists, has never been an actuality. This lag of social understanding behind economic exploitation could not and did not seriously threaten the existence of the system in the period of swift expansion, because there were always such safety valves as increasing population, free land, new inventions, and new industries to relieve the strains of internal pressures. But with the disappearance of these outlets in the Great Transition the impotence of reciting chants of faith and other forms of social evangelism becomes evident.

I have resorted to this oversimplified categorizing of the allegiances of our people for only one purpose; that is to throw out into sharp relief the tendency for the ninety-and-nine among us to take sides rather than to take thought, and the difficulty in obtaining a hearing for the "one" among us who sponsors the true democratic method in these trying times.

2. How the Scientific Students of Our Changing Culture Achieve Their Positions on Fundamental Social Issues

Our reference to the groups that clamor for the teacher's allegiance shows clearly that it is impossible for him to align himself with any one of them. By the very nature of what he professes—that is, study, confronting problems, assembling data, discussion—he cannot be a blind protagonist in his approach to the social problem. He is a social engineer—a student of man and his changing society, not a devotee of a faith, nor a mere loyal member of a party.

To take our most important economic example: He will view

the economic-social scene today as an engineer would view it, recognizing only three factors—first, 127,000,000 human beings who need the finest standard of living that their land can provide; second, a rich continent of natural resources and a giant machine technology; third, a numerous personnel of skilled and experienced research, executive, and technical workers who are competent to exploit the resources, transform them into goods, and deliver them to the people.

The method by which the educator shall take a position on fundamental social issues follows, then, directly from that statement of his viewpoint. He will adopt the method of the scientific students of civilization. With them he will reject all ballyhoo and devices of partisan affiliation — slogans, marching bands, salutes, badges, and membership in propaganda organizations. He will build his concepts, draw his conclusions, and form his attitudes from the most completely validated data of social analysis that can be assembled. And note: it is those conclusions that will state his position! Thus he does not adopt the position of a partisan group because of the obligations of membership in it; he arrives at his position by social study and careful thinking.

The Educator's Strategy in Reconstruction

But does the responsibility of the educator stop there? It does not. He is responsible for being more than a leader of community study. He must see that the results of the study are carried into action, and to do that he must collaborate with others of like approach in political groups. It is at that point, only at that point, that he becomes a vigorous protagonist. Having achieved his position by rigorous investigation, he will defend it with his life if need be. I do not mean that he will hold to it against new and better evidence of social change! Not at all. He will regard each conclusion and hence each position as hypothetical and tentative, to be continuously subject to revision as time passes and social trend accumulates. But he does not hold it everlastingly in suspense, waiting for more trend to accumulate! He seeks constantly to write it into community life.

Thus he has a special role to play in political life. He becomes a kind of intellectual adviser in statesmanship to those who are more skillful than he is in political organization and who will help to put his scientifically derived program into action.

Thus he and his fellow citizens go from the forum into the political arena, nominating and electing candidates for offices in each of the divisions of government. This is true scientific government in the democratic way. Permanent and sound social change can be brought about in America by no other method.

Summing the matter up, then, I see the necessary strategy of the educator in educational and social reconstruction as that of (1) creating intelligent understanding in a large minority of the people, (2) practicing them continually in making group decisions concerning their local and national issues, and (3) having them constantly exert pressure upon legislators and executives in government to carry out their decisions.

Such a program will be firmly founded in that, first, it will fuse education, political decisions, and political action into one process; second, it will bring adults and young people into the same community enterprise. It will integrate information-getting, decision-making, and community action.

It will be objected that this is "gradualism." Yes, it will be so labeled; but note that a program of gradualism which will be dynamic enough to succeed in our current crisis will be a strategy which bristles with life. It will change from month to month to fit the corresponding changes in the emotionally charged economic-psychological scene.

A Challenge to the Curriculum-makers of the Nation

Last of all I wish to speak directly to the curriculum-makers of American education. In an ideal sense, of course, they include all the teachers. If given freedom in his work the individual teacher stands in the most strategic position to make the curriculum each year with his particular group of children. Theo-

retically he is the only true curriculum-maker. But in the practical sense, as local and state systems are now run, he is not. As I showed in detail in Chapter VIII, the curriculum is still made, largely in advance, by a group of very influential persons who can properly be called the curriculum-makers of American education.

I refer to several groups of professional educators. First, there are those who are set aside as "Directors of Curriculum" in many large cities and state departments. These persons, with periodically appointed committees of teachers, outline the activities of the "course of study," choose the books and other instructional materials, and "train" the teachers in the use of them. These selected groups play a central role in the making of programs of work in the local and state school systems.

Behind them, determining what they do to a considerable extent, is another and even more powerful group. It is composed of those who make the books and other instructional materials, especially the nationally known professors of education and of special subject fields. As we have shown in Chapter VIII, courses of study in the rank and file of schools are still largely replicas of these materials and of the outlines of recommended content which are prepared by regional and national commissions.

Now those of my readers who have followed and accepted the argument of this book will visualize clearly the magnificent opportunity before this small body of people. It cannot be doubted that if they could reach a fair degree of unanimity in the matter of major changes in the content and organization of the curriculum, they could bring them about throughout the bulk of American schools in a comparatively small number of years.

I recognize, of course, that the kind of child-centered, society-centered school I have described in this book can be set up all over this continent only when hundreds of thousands of child-centered teachers are sufficiently alert and aware of the problem to be able to do it. I have no false illusions concerning the speed with which the attitudes of a regimented scholastic teaching staff can be transformed. That process is indeed slow and evo-

lutionary, the product of hard study, determined effort, and contact with artist-teachers, and they are indeed all too small a company. At even that point, however, the gains of the past twenty-five years give definite promise of greatly accelerated progress in the next decade.

But I come back to these behind-the-scene curriculum-makers. They can expedite the process of reconstruction enormously by building their materials directly from the problems and issues and changing trends of our social order. They could, if they only would, give our millions of young Americans an honest, intelligent, and intelligible portrait of our industrial-democratic culture. They could depict the new American in action — making and doing — mining, farming, manufacturing, transporting, exchanging, governing. They could show him breathing his personality into creative products — contemplating, thinking, creating with light and shade, with tone and stone, marble and steel, with the moving body.

In the next fifteen years upwards of fifteen million youths will be graduated from American high schools. Will they be at least moderately well informed and clear concerning the really basic issues of our civilization? Or will they be as ignorant of the crucial trends, as bewildered and uncertain, as the preponderance of our youth are today? If there is any one body of Americans who should regard themselves as obligated to answer that question, it is the educational workers and, within their company, especially those who play the chief part in the formulation and control of the life and program of the school.

Appendix

WHAT TO READ

THERE IS a vast and growing literature of social and educational reconstruction. To reduce it to some semblance of order I have organized it as follows:

I. THE CURRENT ECONOMIC-SOCIAL SCENE, ITS PROBLEMS, AND THE TRENDS WHICH PRODUCED THEM

There is no one best book with which to begin, but there are several that should be read early in your study. As an introduction I should read something of STUART CHASE'S, probably his *Economy of Abundance* (1934) or *A New Deal* (1932) (both published by Macmillan). HAROLD F. CLARK'S *Introduction to Economic Problems for Students and Teachers* (Macmillan, 1936) will also be helpful.

HAROLD RUGG'S The Great Technology (John Day, 1933) sketches the historical background and deals with the current crisis; it is written especially with educational implications in mind. Rugg's Changing Governments and Changing Cultures (Ginn, 1931) ties together the chief strands of the world's march toward democracy.

As you build an introductory view of our times, read from two contrasting sets of books to visualize the capacity of our economic system: Harold Loeb's Chart of Plenty (Viking Press, 1935), for the view of the engineer-abundance men; Loeb also has a little primerlike interpretation that is good, Production for Use (Basic Books, 1936). Against the engineer's interpretation read that of the most emancipated of the professed economists, the Brookings Institution group under the leadership of Harold Moulton. See especially Nourse and associates' America's Capacity to Produce (1934) and Leven, Moulton, and Warburton's America's Capacity to Consume (1934). Their studies are summed up in Moulton's Income and Economic Progress (1935). (All three are published by the Brookings Institution, Washington, D.C.) As this book goes to press, a

new analysis comes to hand: WARE and MEANS'S The Modern Economy in Action (Harcourt, Brace, 1936.)

For the long-time view and an exciting and fundamental interpretation of the factors and trends of industrial civilization don't miss Lewis Mumford's *Technics and Civilization* (Harcourt, Brace, 1934); see especially the later chapters for the role of the arts.

The best single full-length history of the trends is HARRY ELMER BARNES'S History of Western Civilization (Harcourt, Brace, 1935), especially Volume II. For the American background, out of an enormous library, I would pick the BEARDS' Rise of American Civilization (Macmillan, 1927), J. T. ADAMS'S Epic of America (Little, Brown, 1931), SIMONS'S Social Forces in American History (International Publishers, 1926).

I would also read a little in Walter N. Polakov's The Power Age (Covici Friede, 1933).

For right-wing or middle-of-the-road interpretations of our contemporary scene see Ralph Robey's Roosevelt vs. Recovery (Harper, 1934); Recent Economic Changes (2 vols., 1929) and Recent Social Trends (2 vols., 1933) (both published by McGraw-Hill). These are large source books, valuable for their basic data. Economic Reconstruction (Columbia University Press, 1934), made by a committee of Columbia University professors, presents the point of view of gradual reconstruction within the framework of private capitalism. President Roosevelt's On Our Way (John Day, 1934) and other addresses also present this point of view.

Of the many evaluations of the Roosevelt administration's first two years I would use Louis M. Hacker's Short History of the New Deal (Crofts, 1934) for its objective historical view and Stolberg and Vinton's Economic Consequences of the New Deal (Harcourt, Brace, 1935) for its incisive criticism.

For an understanding of our potential economic resources, especially the new metals, alloys, and fuels, and examples of giant and clever machines see Jonathan Leonard's *Tools of Tomorrow* (Viking Press, 1935) and Hodgins and Magoun's *Behemoth*, the Story of Power (Doubleday, Doran, 1932).

For a British Communist's interpretation of the world-wide depression since 1929 see John Strachey's *The Coming Struggle for Power* (Covici Friede, 1933). For the world situation seen against nineteenth-century backgrounds see G. D. H. Cole's *Guide through World Chaos* (Knopf, 1932).

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What about "Fascism"? I suggest six books out of many new ones available.

- 1. For the background of the movement in Italy one of the best interpretations is H. W. Schneider's *Making the Fascist State* (Oxford University Press, 1928).
- 2. For a critique of its application in Italy and Germany, made by a leading British Communist, see John Strachey's *The Menace of Fascism* (Covici Friede, 1933).
- 3. For a study of its imminence in the United States, made by a man who would like to be a Fascist leader himself, see LAWRENCE DENNIS'S The Coming American Fascism (Harper, 1936).

4. HAIDER'S Capital and Labor under Fascism (Columbia University

Press, 1934) supplies additional factual economic material.

For the rise and background of the movement in Germany see C. B. HOOVER'S Germany Enters the Third Reich (Macmillan, 1933).

6. For a critical interpretation of German Fascism by an American newspaper reporter see Mowrer's Germany Puts the Clock Back (Morrow, 1933).

2. THE PSYCHOLOGY OF THE AMERICAN MIND AND THE CONTROVERSIAL PROBLEM OF "CLASS"

There is a new and growing literature of analysis of the American outlook and temper, of which the two chief opposed views are best given by Lewis Corey's Marxian interpretation, The Crisis of the Middle Class (Covici Friede, 1935), and Alfred Bingham's liberal-democratic Insurgent America (Harper, 1935). Some of the best of the many recent eyewitness accounts are James Rorty's Where Life Is Better: An Unsentimental American Journey (Reynal and Hitchcock, 1935), Edmund Wilson's The American Jitters (Scribner, 1935) and his Travels in Two Democracies (Scribner, 1936), John Spivak's America Faces the Barricades (Covici Friede, 1935), Sherwood Anderson's Puzzled America (Scribner, 1935), Herbert Agar's Land of the Free (Houghton Mifflin, 1935), Agar and Tate's Who Owns America? (Houghton Mifflin, 1936), Erskine Caldwell's Some American People (McBride, 1935).

Controversial issues concerning the American mind and class conflict are discussed in a symposium of articles in the *Social Frontier* for 1035 and 1036.

Moreover, we must not forget that the best-grounded interpretations are those that are based on historical as well as contemporary study. Hence do not miss J. T. Adams's *Epic of America* (Little,

Brown, 1931), various volumes of CHARLES BEARD'S, especially Rise of American Civilization (Macmillan, 1927), and F. J. TURNER'S The Frontier in American History (Holt, 1921).

3. Conflicting Psychologies and Their Contribution to Social and Educational Reconstruction

Perhaps the one best and the most readable single critique is Bode's Conflicting Psychologies of Learning (Heath, 1929); the best layman's symposium, although rather old now, is Psychologies of 1925 (Clark University Press, 1925). In it John B. Watson (behaviorism), Koffka (Gestalt), and leaders of other schools have each his say. Everett Dean Martin's Psychology (Norton, 1924) is a readable and fair interpretation of the leading schools; so also is Heidbreder's Seven Psychologies (Appleton-Century, 1936).

To pick a single book or two for each of several points of view,

I would use these:

1. For behaviorism the best single interpretation is J. B. Watson's Behaviorism (Norton, 1930).

2. For the scientific physiological evidence for the organismic approach: Child's Physiological Foundations of Behavior (Holt, 1924) and Cannon's Bodily Changes in Pain, Hunger, Fear, and Rage (Appleton-Century, 1929).

3. For the organismic approach: Wheeler and Perkins's Principles

of Mental Development (Crowell, 1932).

4. The clearest and most adequate interpretation of Gestalt psychology that I have found is Hartmann's Gestalt Psychology (Ronald Press, 1935).

5. For the general functional approach: Woodworth's Psychology (Holt,

3d ed., 1935) and John Dewey's How We Think (Heath, 1910).

6. For the psychoanalytic approach: Freud's General Introduction to Psychoanalysis (Liveright, 17th ed., 1927). For an excellent layman's interpretation see E. D. Martin's Psychology (Norton, 1924); this book has also chapters on behaviorism and other schools.

7. For the best single systematic introduction to "social psychology": Young's Social Psychology (Knopf, 1930). The most adequate reporting of the scientific studies is the Murphys' Experimental Social Psychology

(Harper, 1931).

8. For a critical study of the psychology of public opinion, including especially the role of the stereotype, Walter Lippmann's *Public Opinion* (Harcourt, Brace, 1922), although old, is still the best.

9. For the genetic approach to the problems of such social institutions as language, exchange, government, etc. see Judd's *Psychology of Social Institutions* (Macmillan, 1926).

4. THE GENERAL TREND OF PHILOSOPHY AND THE PROGRAM OF THE NEW EDUCATIONISTS

Again the literature is enormous. I shall perhaps be counted "wrong" no matter what I pick; but here is a short list. To me the single best interpretation of the scientific-experimentalist approach is The Educational Frontier (Appleton-Century, 1933), by KIL-PATRICK, DEWEY, BODE, CHILDS, RAUP, THAYER, and HULLFISH. Of Dewey's recent books it is difficult to pick one, but I should say look into Individualism, Old and New (Minton, Balch, 1930), Liberalism and Social Action (Putnam, 1935), and the first few chapters of Art as Experience (Minton, Balch, 1934).

For a liberal-group judgment on the need of considerable reconstruction of the educational program see the summary volume of the Commission on History and Social Studies in the Schools, of the American Historical Association: Conclusions of the Commission (Scribner, 1034). Nine separate volumes are available.

For recent statements of WILLIAM H. KILPATRICK'S views see his Education for a Changing Civilization (Macmillan, 1926), Education and the Social Crisis (Liveright, 1932), and Remaking the Curriculum (Newson, 1936). For George Counts's views see his Social Foundations of Education (Scribner, 1934).

CHARLES H. JUDD's position is summed up in his recent short book Education and Social Progress (Harcourt, Brace, 1034).

5. The Reconstruction of the Curriculum

Perhaps the best single compilation and report of the studies is NORTON and NORTON'S Foundations of Curriculum Building (Ginn, 1936). Their interpretations are from the general standpoint that I have described as "administrative rearrangement."

For description and critical appraisal of the so-called progressive schools see Rugg and Shumaker's The Child-Centered School (World Book Company, 1928). One of Gordon Melvin's books should be looked at, preferably The Activity Program (John Day, 1936).

The reactions of KILPATRICK, DEWEY, BODE, COUNTS, BEARD, CHILDS, et al. can be found in references already cited.

6. THE ROLE OF ART AND THE ARTIST IN AMERICAN LIFE AND EDUCATION

I regard the later chapters of Lewis Mumford's Technics and Civilization as one of the best available and most exciting studies. Rugg's Culture and Education in America (Harcourt, Brace, 1931) was written especially on the theme of the artist in social and educational reconstruction.

To understand how the critical study of this problem arose I should read here and there in the writings of the nonuniversity school of social criticism that formed about 1915. See especially the pioneer essays of Waldo Frank, Our America (Boni & Liveright, 1919) and The Re-discovery of America (Scribner, 1929), Van Wyck Brooks's Letters and Leadership (Huebsch, 1918), Randolph Bourne's Untimely Papers (Huebsch, 1919) and his History of a Literary Radical (Huebsch, 1920). If you can secure secondhand copies of the Seven Arts (magazine, 1916–1917), you will be fortunate.

Certainly no student of the creative spirit in modern life should miss HAVELOCK ELLIS'S The Dance of Life (Houghton Mifflin, 1923).

Louis H. Sullivan's Autobiography of an Idea (Institute of American Architects, 1924) and Frank Lloyd Wright's Autobiography (Longmans, 1932) must not be missed by those who wish to understand the struggle of the creative artist to make himself heard in our uproarious commercial America—and to understand many other things about the American also. Lewis Mumford's little Sticks and Stones (Boni & Liveright, 1924) is one of the best studies of the expression of American culture through its architecture.

ISADORA DUNCAN, America's — indeed, the world's — first great modern dancer, wrote about America and the art of the dance. See her *The Art of the Dance* (Theatre Arts, Inc., 1928), edited by Sheldon Cheney.

SHELDON CHENEY'S books constitute a fine lay introduction to the arts in America. See especially his A Primer of Modern Art (Liveright, 1932), Expressionism in Art (Liveright, 1934), New World Architecture (Longmans, 1939), and The Theatre (Longmans, 1929).

JOHN COWPER Powys's The Meaning of Culture (Norton, 1929) is a deep and thrilling study of the elements of "personal culture," which should be read along with Dewey's analytic Art as Experience (Minton, Balch, 1934).

The role of Alfred Steiglitz as one of the great focusing centers

of honest, indigenous American art can be gathered from America and Alfred Stieglitz (Doubleday, Doran, 1034).

So much for a few gleanings out of an enormous library about art and the artist in American life. What about its application in education? The pioneer work that every teacher should know is Hughes Mearns's Creative Youth (Doubleday, Doran, 1925). Miss Shumaker and I devoted half of our The Child-Centered School (World Book Company, 1928) to the artist-teacher and his work with the child-as-artist. In 1931 my Culture and Education in America (Harcourt, Brace, 1931) discussed the problem more critically.

One of the finest symposiums is HARTMANN and SHUMAKER'S (editors) Creative Expression (Progressive Education Association, 1926).

While warning you that a "guide to reading" is out of date in our modern America as soon as it is published, nevertheless I suggest Rugg and Krueger's Social Reconstruction: A Study Guide for Group and Class Discussion (John Day, 1933). This is devoted primarily to economic-social-political problems.

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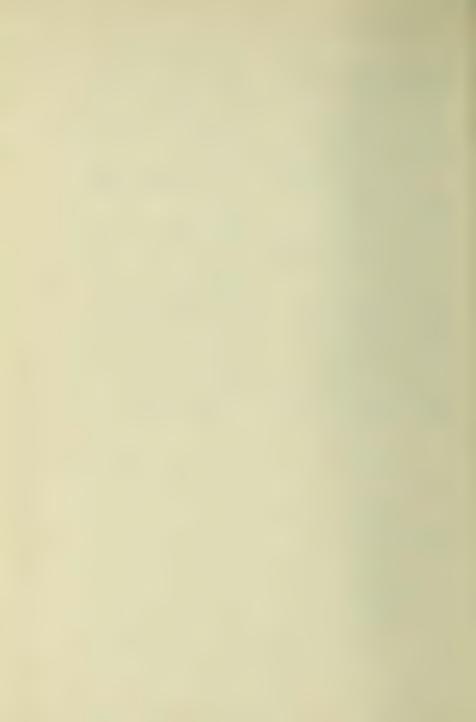
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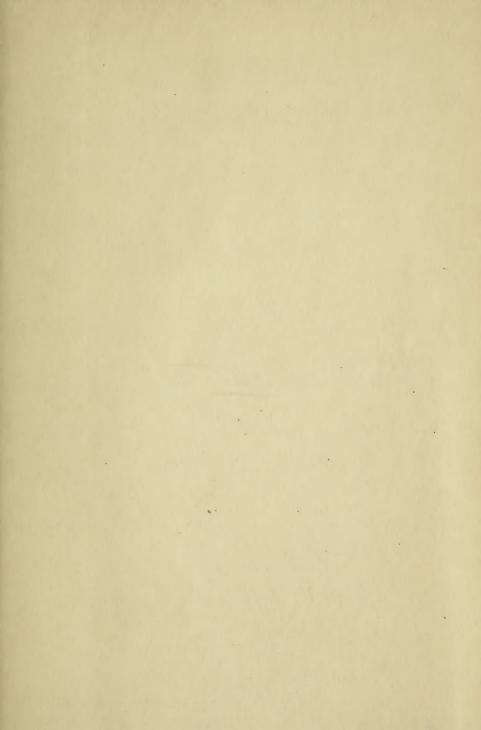
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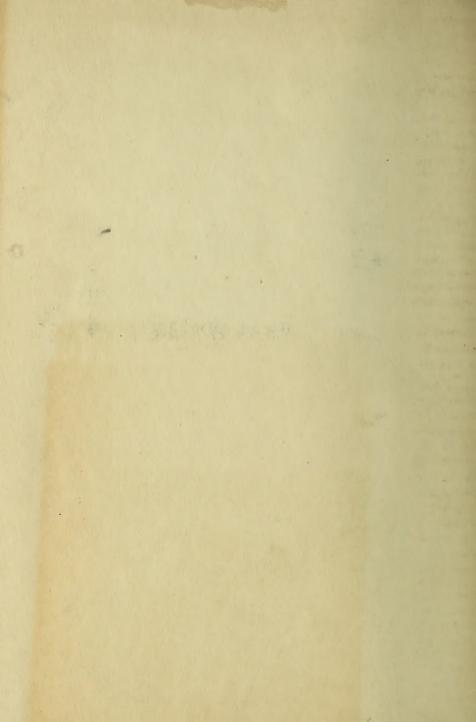
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